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0021010

April 21, 1992

Meeting Minutes Transmittal/Approval
Unit Managers Meeting: 200-BP-1 Operable Unit
450 Hills Street, Richland, WA
March 25, 1992

FROM/APPROVAL: (see) Robert K. Stewart, R.I. Coordinator, RL (A6-95) Date

APPROVAL: Allan Harris Allan Harris, 200-BP-1 Unit Manager, RL (A5-19) Date 4-23-92

APPROVAL: Doug Sherwood Doug Sherwood, 200-BP-1 Unit Manager, EPA (B5-01) Date 4/23/92

APPROVAL: Larry Goldstein Larry Goldstein, 200-BP-1 Unit Manager, WA Department of Ecology Darei Teel (see) Date 4-23-92

Meeting Minutes are attached. Minutes are comprised of the following:

- Attachment #1 - Meeting Summary/Summary of Commitments and Agreements
- Attachment #2 - Agenda for the Meeting
- Attachment #3 - Attendance List
- Attachment #4 - Status of Action Items
- Attachment #5 - 200-BP-1 Task 6 Activities
- Attachment #6 - Chemistry Data
- Attachment #7 - 200-BP-1 Sorption/Column Leach Testing
- Attachment #8 - 200-BP-1 Task 7 Groundwater Sampling
- Attachment #9 - Source and Vadose Sampling
- Attachment #10 - Task 2 Background Sampling
- Attachment #11 - Schedule



Prepared by: Suzanne Clarke Date: 4-23-92
Kathy Knox, Suzanne Clarke, GSSC

Concurrence by: M.B. Buckmaster Date: 4/23/92
Mark Buckmaster, WHC RI Coordinator

Attachment #1

Meeting Summary and Summary of Commitments and Agreements

**200-BP-1 Unit Managers Meeting
March 25, 1992**

1. SIGNING OF THE JANUARY AND FEBRUARY 200-BP-1 MEETING MINUTES:

Minutes from the January and February 200-BP-1 Unit Managers Meeting were reviewed, after changes were incorporated the minutes were approved.

2. ACTION ITEM UPDATE (See Attachment #4):

There were no outstanding action items to present.

3. NEW ACTION ITEMS (INITIATED MARCH 26, 1992):

No new Action Items were added at this meeting.

4. STATUS OF REMEDIAL INVESTIGATION TASKS:

Work Plan Change Requests (see Attachment #2): Mark Buckmaster reported there were no new work plan changes. M. Buckmaster inquired about the status of the WHC work plan change request presented at the February Unit Managers Meeting. Allan Harris stated that although he anticipates no problems, it is still under consideration.

Task 6, Phase IB Wells/Well Remediation (see Attachment #5): M. Buckmaster noted that 11 wells require remediation. Three of these have been evaluated (59-58, 60-57 and 60-60); their locations are marked with asterisks in the map on page 2 of Attachment #5. These three wells will probably be the first wells to be remediated, and that they will be incorporated into the network as soon as remediation is complete.

- Well 60-60 (pg.5): Planned remediation: remove the cement plug at the bottom, remove the piezometer, do the overdrilling, swabbing, and cleanout.
- Well 60-57 (pg.4): This well has a blank section between 50 and 60 feet. The plan is to backfill and ground the casing just below the screen interval (between 60 and 70 feet), do overdrilling, install post, and pads.
- Well 59-58 (pg.3): Planned standard remediation; do overdrilling, install post and pads.

Analytical Results From Groundwater Sampled at Wells 59-58, 60-57, 60-60): Analytical data from previous sampling rounds have been provided in response to a request by Doug Sherwood (see Attachment #6).

Task 11, Hydraulic Pump Testing: M. Buckmaster will prepare a report on the large scale pump test and transmit the report in approximately one month.

Column Leach Testing: Column leach testing is planned to begin in early April for 43 crib, and 57. However, limited sample volumes restrict the number of samples available for quality control (QC). Jeff Lerch proposed that CLP

analytical methods would be used with reduced QC samples. The matrix spikes would be performed on blanks for a batch. D. Sherwood suggested omitting analyses of lower-priority analytes. M. Buckmaster stated that analyses were prioritized as follows: radiochemicals, metals, and anions.

Since the testing is to occur within the next week or two, a verbal approval of the sampling and analysis methods was requested from the regulators. D. Sherwood agreed if: 1) CLP methodology (for analytes) was utilized (although protocols for QC, zero headspace, and addition of preservatives was either reduced or altered), and 2) usable data for analytes of highest concern was obtained before samples were used to quantify analytes of lower concern.

Column Sorption Testing (see Attachment #7): A meeting was scheduled with the regulators for March 30, 1992, to discuss strategies for relevant testing conditions. Specifically, the cribs received waste streams containing radiochemicals and heavy metals in addition to complexing agents. The complexing agents could greatly alter the adsorption of cations to silicate substrates. In order for the tests to be meaningful, the test conditions must mimic actual conditions. (Existing dissociation constants for many analytes of concern are given on page 2.)

Leak Detection Testing (Attachment #7, page 3): This is scheduled to begin within the next month. The pipes will be excavated to evaluate pipe integrity.

Task 7, Groundwater Sampling (Attachment #8): Analytical results for the first quarter of groundwater sampling should be completed within the next two to three weeks. For the second quarter of groundwater sampling, M. Buckmaster stated that less than half of the radiochemical analysis data had been received (summary on pg. 2).

Task 2/4, Crib Characterization - Borehole Drilling (Attachment #9) The status of the task is indicated by the diagram on page 1. The data shown on pages 2 and 3 are for shipping purposes and give an indication of levels of contamination as a function of depth. Source and vadose sampling has been ongoing, exposure has continued to be higher than anticipated, ranging from six to twelve rem per hour.

Task 2, Background Sampling (Attachment #10): The elimination of the three background boreholes was discussed. D. Sherwood stated that the subject would have to be deferred until the crib borehole data was available for regulatory review.

200-BP-1 Task Schedule Update (Attachment #11): M. Buckmaster presented the schedule updates. D. Sherwood stated that a delay in TPA milestone M-15-028-T1 was approved by the project managers, moving it from February 1993 to March 1993.

5. TRANSMITTAL OF WEEKLY RECORD OF SAMPLES COLLECTED:

D. Sherwood specifically requested that he be sent a weekly listing of samples collected. These samples should be identified by HEIS sample No.

Attachment #2

AGENDA

**200-BP-1 Operable Unit Managers Meeting
March 25, 1992**

Introduction:

Status:

Action Items:

- o No Action Items

Work Plan:

- o No Changes

Remedial Investigation:

- o Task 6 Phase IB Wells/Well Remediation
- o Task 11 Hydraulic Pump Testing
- o Column Leach/Sorption Testing
- o Task 3 Leak Detection Testing
- o Groundwater Sampling
- o Source and Vadose Sampling

Issues:

Other Topics:

- o Schedule

Agreements and Commitments

Attachment #3

**200-BP-1 Operable Unit Managers Meeting
Official Attendance Record
March 25, 1992**

Please print clearly and use black ink

PRINTED NAME	SIGNATURE	ORGANIZATION	O.U. ROLE	TELEPHONE
Diana Hart	Diana Hart	DOE	EPA Support	(206)-573-6510
Mike Hartnett	Mike Hartnett	EPA	Office Manager	360-326-5529
Jeff Erickson	Jeff Erickson	DOE RL	DOE Manager	6-3633
Tom Jaffrey	Tom Jaffrey	DOE-FIP	KLINIC Wright	209) 903-7428
Allan C. Harris	Allan C. Harris	DOE-RL	O.U. Manager	509-376-4335
John L. Johnson	John L. Johnson	DOE	DOE-RL	15341376-9007
Mike O'Leary	Mike O'Leary	Ecology	H. Linger	(206) 438-75
Billie Mawes	Billie Mawes	Ecology	PLANT	360) 546-X19
John Morrison	John Morrison	Ecology	PLANT	1806) 442-7325
Mark Spector	Mark Spector	Ecology Support	Ecology Support	503) 244-2005
Rich Muller	Rich Muller	METRIX	Ecology Support	503) 244-2005
Jeff Sturtevant	Jeff Sturtevant	LSSC	EPAS Support	92-615
Donna Lacombe	Donna Lacombe	PRC	EPA Contractor	(206) 624-2682
Jeff Lerch	Jeff Lerch	WHC	OSM	(509)373-3419
John L. Morris	John L. Morris	Ecology	Ecology	622-271-2828
Mark Brunkmaster	Mark Brunkmaster	DOE	DOE	509-372-6636
B.J. McCloskey	B.J. McCloskey	WHL	RI Coor	509-376-1792
TC King	TC King	DOE	GSSC	(509)372-1882
			GSSC	509-376-472

Attachment #3

Attendance

200-BP-1 Operable Unit Managers Meeting
March 25, 1992

<u>Name</u>	<u>Org.</u>	<u>O.U. Role</u>	<u>Phone</u>
Jon Sprecher	BC	Ecology Support	503-244-7005
Chuck Cline	Ecology	Hydrogeology	206-438-7556
Rich Hibbard	Ecology	Unit Manager	206-493-9367
Billie Mauss	Ecology	CERCLA	509-546-2993
Doug Sherwood	EPA	Unit Manager	509-376-9529
Rich Mullen	Parametrix	Ecology Support	206-455-2550
Donna Lacombe	PRC	EPA Contractor	206-624-2692
Julie Erickson	RL	Branch Chief	509-376-3603
Allan Harris	RL	Unit Manager	509-376-4339
Mark Janaskie	DOE-HQ	RL/HQ Oversight	202-903-7428
Suzanne Clarke	SWEC	GSSC, RL	509-372-0630
William Fryer	SWEC	GSSC, RL	509-376-9830
Joe King	SWEC	GSSC, RL	509-376-4726
Bill McClung	SWEC	GSSC, RL	509-376-1853
Brian Drost	USGS	EPA Support	206-593-6510
Ward Staubitz	USGS	EPA Support	206-593-6510
Mark Buckmaster	WHC	RI Coordinator	509-376-1792
R.A. Carlson	WHC	200/300 RI's	509-376-9027
Jeff Lerch	WHC	OSM	509-373-3419

Attachment #4

Status of Action Items

**200-BP-1 Operable Unit Managers Meeting
March 25, 1992**

There were no new actions items initiated at this meeting.

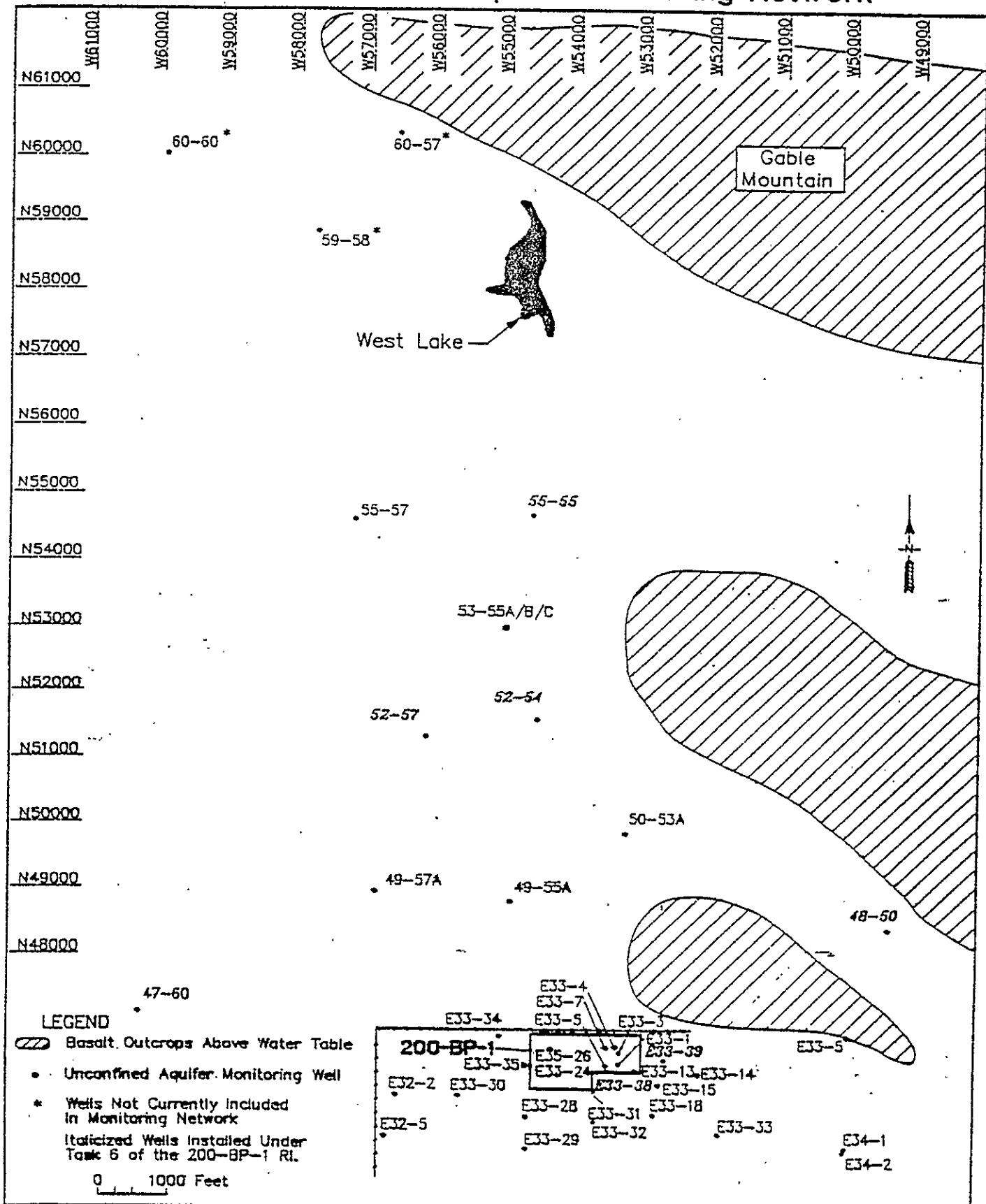
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200-BP-1 TASK 6 ACTIVITIES

Task 6 Phase IB wells.

- o Well 699-57-59 is drilled to 41 ft.
- o "Fitness for Use" for wells 699-60-60, 699-59-58, and 699-60-57 is continuing.

200-BP-1 Unconfined Aquifer Monitoring Network



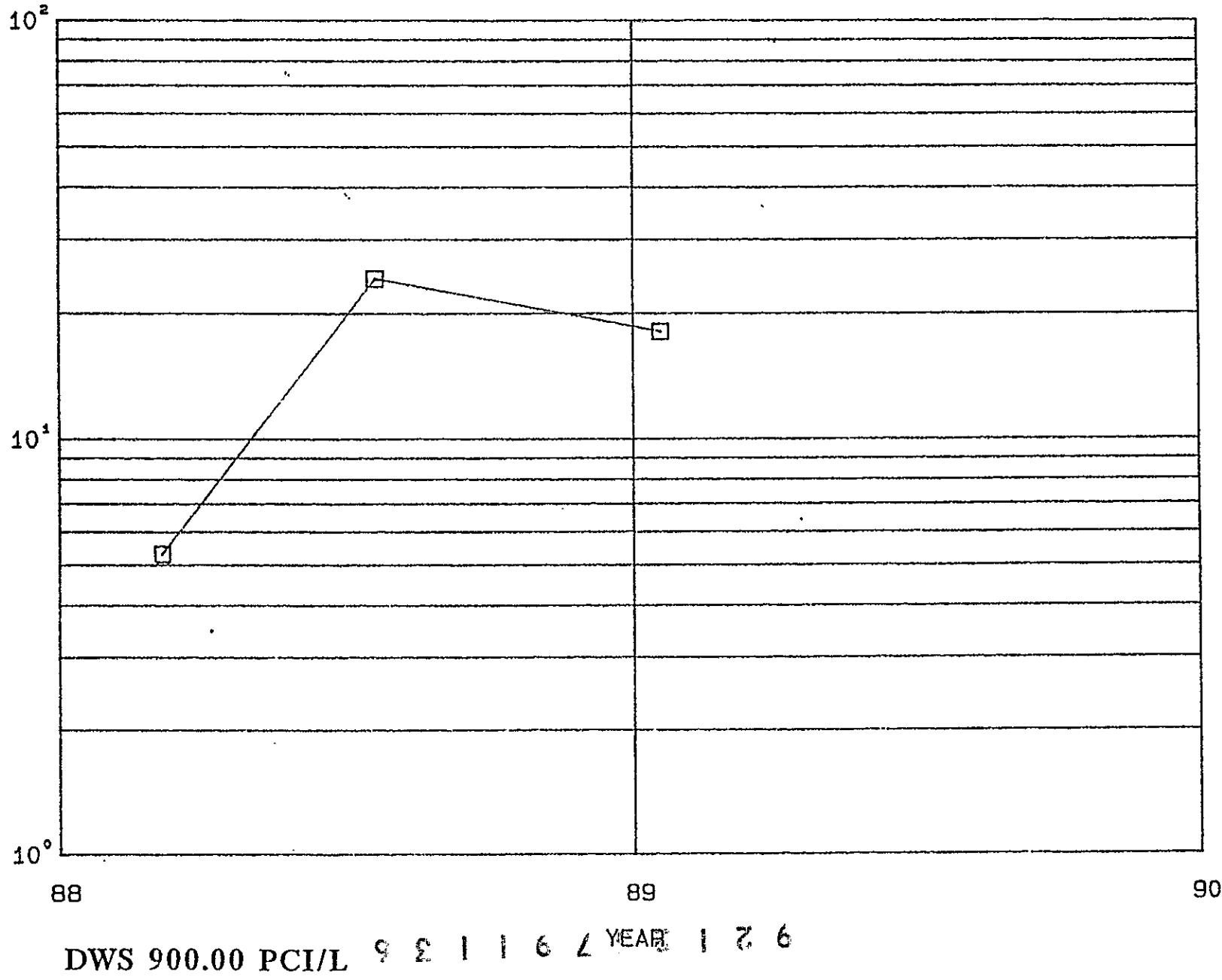
WELL CONSTRUCTION AND COMPLETION SUMMARY			
Drilling Method: <u>Cable tool</u>	Sample Method: <u>Hard tool</u>	WELL NUMBER: <u>699-59-58</u>	TEMPORARY WELL NO: <u>GBM-8</u>
Drilling Fluid Used: <u>None</u>	Additives Used: <u>None</u>	Hanford Coordinates: N/S <u>N</u> 58,859 E/W <u>W</u> 57,763	
Driller's Name: <u>H. Baker</u>	WA State Lic Nr: <u>Not documented</u>	State Coordinates: N <u>464,012</u> E <u>2,237,411</u>	
Drilling Company: <u>Not documented</u>	Company Location: <u>Not documented</u>	Start Card #: <u>Not documented</u>	T <u> </u> R <u> </u> S <u> </u>
Date Started: <u>21Jun72</u>	Date Complete: <u>24Jul72</u>	Elevation Ground surface (ft): <u>494.1</u> Estimated	
Depth to water: <u>90.0-ft Jul72</u> (Ground surface) <u>92.6-ft Jan92</u>		Elevation of reference point: <u>[497.77-ft]</u> (top of casing)	
GENERALIZED Driller's STRATIGRAPHY Log		Height of reference point above [<u>3.7-ft</u>] ground surface	
0+35: SAND, COBBLES, GRAVEL 35+40: SILT, COBBLES, GRAVEL 40+45: COBBLES, BOULDERS, SAND, GRAVEL BOULDER @ 42+43-ft 45+66: SAND, COBBLES, GRAVEL 66+75: SAND & GRAVEL (Casing broke at weld @ 30-ft, pulled casing and redrilled) 75+89: SAND, COBBLES, GRAVEL (Casing broke again @ 30-ft, pulled casing back @ 38.5-ft, welded and redrilled) 89+90: SAND & GRAVEL 90+102: SAND 102+114: Med SAND (Hole started to deviate- decided to stop drilling and set screen.) (Set screen and pulled casing back to 85-ft)		Depth of surface seal <u>[ND]</u> Type of surface seal: <u>None documented</u> I.D. of surface casing <u>[ND]</u> Starter casing documented to 12-ft, assumed pulled	
		I.D. of riser pipe: <u>[6-in]</u> Type of riser pipe: <u>Carbon steel</u> Diameter of borehole: <u>[7-in nom]</u> Type of filler: <u>None documented</u>	
		Depth top perforations: <u>[NA]</u> Description of perforations: <u>None</u> Depth bottom of casing: <u>[85-ft]</u> 6-in Johnson stainless steel, .010 slot telescoping screen, 85+105-ft Set with neoprene packer. 5-ft stainless steel blank section, 105+110-ft	
		Depth bottom of borehole: <u>[114-ft]</u>	
Drawing By: <u>RKL/6#59-58.ASB</u> Date: _____ Reference: <u>HANFORD WELLS</u>			

WELL CONSTRUCTION AND COMPLETION SUMMARY			
Drilling Method: <u>Cable tool</u>	Sample Method: <u>Hard tool</u>	WELL NUMBER: <u>699-60-57</u>	TEMPORARY WELL NO: <u>GBH-7</u>
Drilling Fluid Used: <u>None</u>	Additives Used: <u>None</u>	Hanford	
Driller's Name: <u>K. Smith/W. Rodda</u>	WA State	Coordinates: N/S <u>N 60,350</u>	E/W <u>W 56,612</u>
Drilling Company: <u>Not documented</u>	Lic Nr: <u>Not documented</u>	State	
Date Started: <u>26Jun72</u>	Date Complete: <u>18Jul72</u>	Coordinates: N <u>465,506</u>	E <u>2,238,558</u>
		Start	
		Card #: <u>Not documented</u>	T <u> </u> R <u> </u> S <u> </u>
		Elevation	
		Ground surface (ft): <u>466.6</u> Estimated	
Depth to water: <u>63.0-ft</u> Jul72 (Ground surface) <u>64.1-ft</u> Jan92			
GENERALIZED Driller's STRATIGRAPHY Log			
0~6: BOULDERS-COBLES-cse SAND lge GRAVEL 6~10: COBBLES-lge GRAVEL-cse SAND 10~20: COBBLES-lge-med GRAVEL-cse SAND 20~25: COBBLES-very cse-fine SAND- lge-med-small GRAVEL 25~34 COBBLES-cse-med SAND- lge-med-small GRAVEL 34~37: Very cse-med SAND- lge-med-small GRAVEL 37~38: COBBLES-very cse-med SAND- lge-med-small GRAVEL 38~50: Very cse-med SAND- lge-med-small GRAVEL 50~58: Fine-cse SAND, med-small GRAVEL 58~62: Fine-cse SAND-SILT- med-small GRAVEL 62~64: Fine SAND-SILT-med-small GRAVEL 64~66: Fine SAND-med-small GRAVEL 66~68: Med-fine SAND-med-small GRAVEL 68~74: Fine SAND-med-small GRAVEL 74~76: Fine-med SAND-med-small GRAVEL 76~81: Very fine-med SAND- med-small GRAVEL 81~84: Fine-med SAND-med-small GRAVEL 84~86: Very cse-fine SAND-SILT- med-small GRAVEL 86~88: Fine SAND-SILT- lge-med-small GRAVEL 88~90: Fine SAND-lge-med GRAVEL 90~92: Med-cse SAND-lge-med GRAVEL 92~94: Fine-med SAND-small GRAVEL 94~96: Very fine-fine SAND-small GRAVEL 96~98: Very fine-fine SAND-SILT 98~108: Very fine-fine SAND 108~110: Very fine SAND 110~118: Cse SAND-lge-med-small GRAVEL 120~125: Cse-fine SAND-small GRAVEL <u>Changed Driller</u> 125~133: Black SAND 133~135: Blue SAND & pea GRAVEL 135~141: Blue SAND 141~145: Blue-black SAND 145~148: Rotten BASALT 148~155: BASALT		Elevation of reference point: <u>[469.64-ft]</u> (top of casing) Height of reference point above <u>3.0-ft</u> ground surface Depth of surface seal <u>[ND]</u> Type of surface seal: <u>None documented</u> I.D. of surface casing <u>[ND]</u> I.D. of riser pipe: <u>[8-in]</u> Type of riser pipe: <u>Carbon steel</u> Diameter of borehole: <u>[9-in nom]</u> Type of filler: <u>None documented</u> Bottom of 8-in casing: <u>[59-ft]</u> 10-ft 6-in blank section, 50~60-ft 10-ft .010 slot screen, 60~70-ft 57-ft 6-in blank section, 70~127-ft 20-ft .010 slot screen, 127~147-ft 5-ft blank section 6-in casing, 147~152-ft Screen is stainless steel, Blank 6-in casing assumed stainless steel also 8-in casing stopped at 148-ft Depth bottom of borehole: <u>[155-ft]</u>	
Drawing By: <u>RKL/6#60-57.ASB</u> Date: _____			
Reference: <u>HANFORD WELLS</u>			

WELL CONSTRUCTION AND COMPLETION SUMMARY		
Drilling Method: <u>Cable tool</u>	Sample Method: <u>Hard tool (nom)</u>	WELL TEMPORARY NUMBER: <u>699-60-60</u> WELL NO: _____
Drilling Additives	Used: <u>Not documented</u>	Hanford
Fluid Used: <u>Water</u>	WA State	Coordinates: N/S <u>N</u> 60,030 E/W <u>W</u> 59,964
Driller's Name: <u>Chausse</u>	Lic Nr: <u>Not documented</u>	State
Drilling Company: <u>Not documented</u>	Company	Coordinates: N <u>465,178</u> E <u>2,235,207</u>
Date Started: <u>18May48</u>	Date Complete: <u>01Jun48</u>	Start Card #: <u>Not documented</u> T <u>R</u> <u>S</u>
Elevation Ground surface (ft): <u>509.0</u> Estimated		
<p>Depth to water: <u>115.0-ft</u> Sep56 (Ground surface) <u>106.9-ft</u> Jan92</p> <p>GENERALIZED Driller's STRATIGRAPHY Log</p> <p>0+5: TOP SOIL and BOULDERS 10+20: SAND and BOULDERS 20+25: Fine black SAND 25+30: BOULDERS 30+35: Fine gray SAND and BOULDERS 35+40: Fine black SAND 40+45: Coarse black SAND 45+55: SAND, GRAVEL and BOULDERS 55+60: SAND and GRAVEL 60+65: Black SAND 65+68: Coarse black SAND 68+70: SAND, GRAVEL and BOULDERS 70+73: Black and white SAND 73+80: Black and white SAND and GRAVEL 80+83: Black and white SAND 83+90: Black and white SAND and GRAVEL 90+95: Black and white SAND 95+98: Black and white SAND and GRAVEL 98+100: Brown CLAY 100+110: Brown CLAY and GRAVEL 110+115: Fine black and white SAND and CLAY 115+125: CLAY and GRAVEL 125+128: Coarse black and white SAND and BOULDERS 128 : BASALT</p>		
<p>Elevation of reference point: <u>[512.03-ft]</u> (top of casing)</p> <p>Height of reference point above ground surface: <u>[3.0-ft]</u></p> <p>Depth of surface seal: <u>[HD]</u></p> <p>Type of surface seal: <u>None documented</u></p> <p>I.D. of surface casing (If present): <u>[HD]</u></p> <p>I.D. of riser pipe: <u>[8-in]</u> Type of riser pipe: <u>Carbon steel</u></p> <p>Diameter of borehole: <u>[9-in nom]</u></p> <p>Type of filler: <u>None documented</u></p> <p>1.5-in piezometer tube Assumed carbon or galvanized steel</p> <p>Depth top of perforations: <u>[100-ft]</u> Description of perforations: <u>100+127-ft, 2 holes/ft</u> Cement plug 110+115-ft</p> <p>No documentation of gravel or sand pack Piezometer screen 120+125-ft 60 slot</p> <p>Depth bottom of perforations: <u>[127-ft]</u></p> <p>Depth bottom of casing: <u>[128-ft]</u></p> <p>Depth bottom of borehole: <u>[133-ft]</u></p>		
<p>REMEDIATIONS:</p> <p>19Sep56 - By Row/Richards Perforated 100+127-ft</p> <p>17Nov76 - By M. Bultena Cemented well to 126-ft</p> <p>07+08Jun77 - By D. Bigham Set piezometer 120+125-ft Placed cement plug 110+115-ft</p> <p>Borehole deepened by coring 1976 5-ft core 128+133-ft Esquatzel Basalt</p>		
<p>Drawing By: <u>RKL/6#60-60.ASB</u> Date: _____</p> <p>Reference: <u>HANFORD WELLS</u></p>		

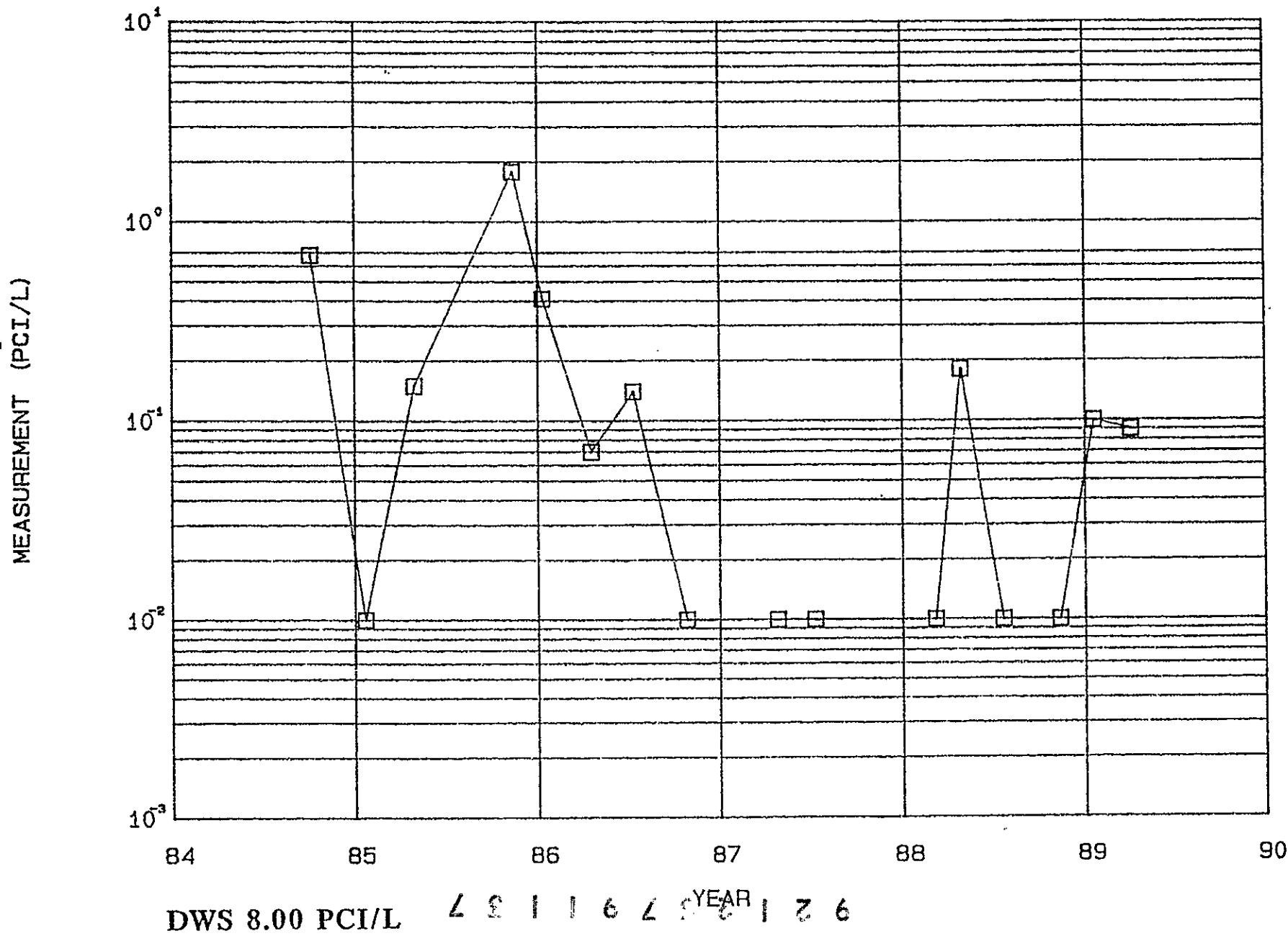
TECHNETIUM-99

Well: 6-59-58
Code: 197 □



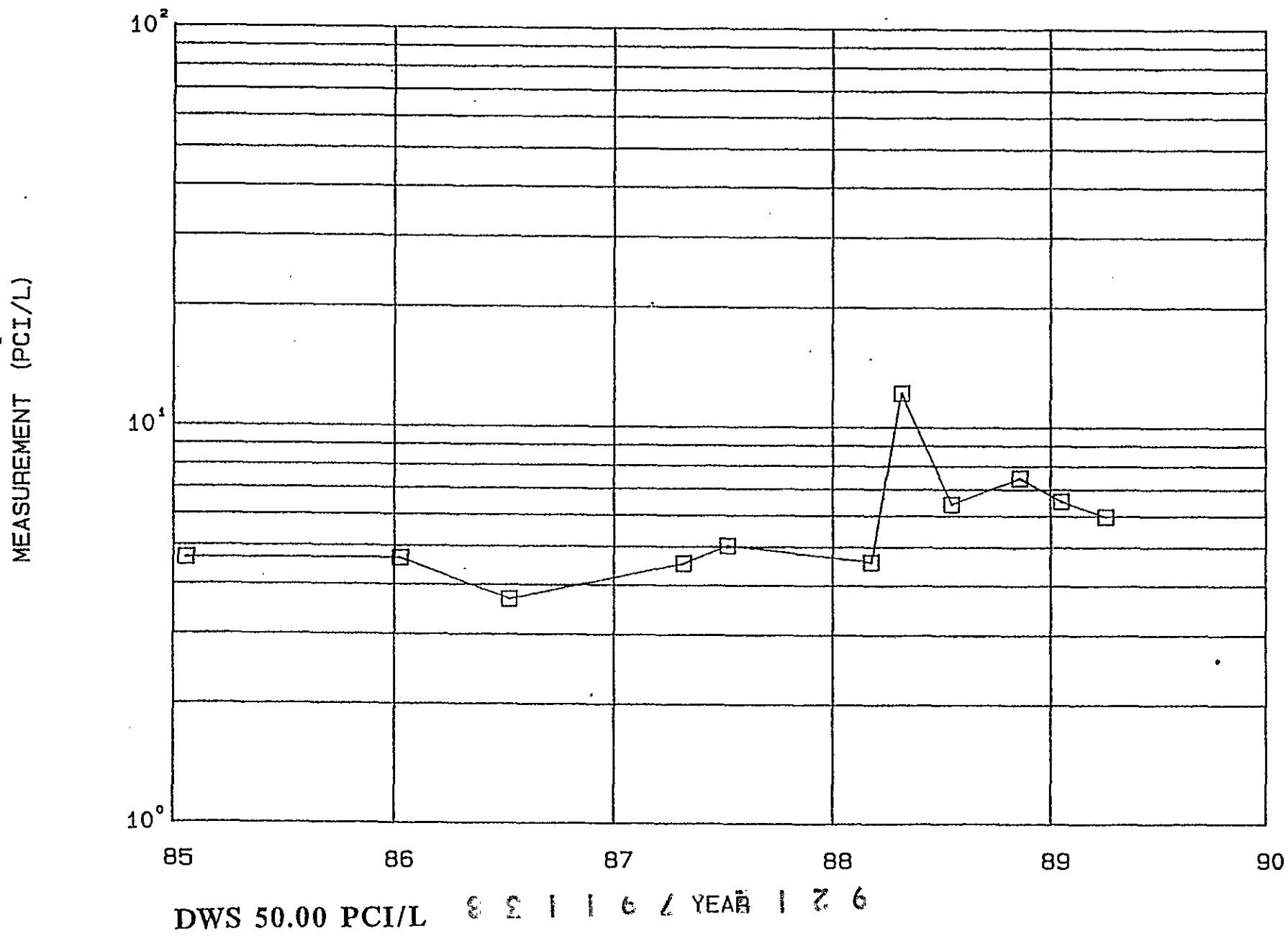
STRONTIUM-90

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Code: 121 □



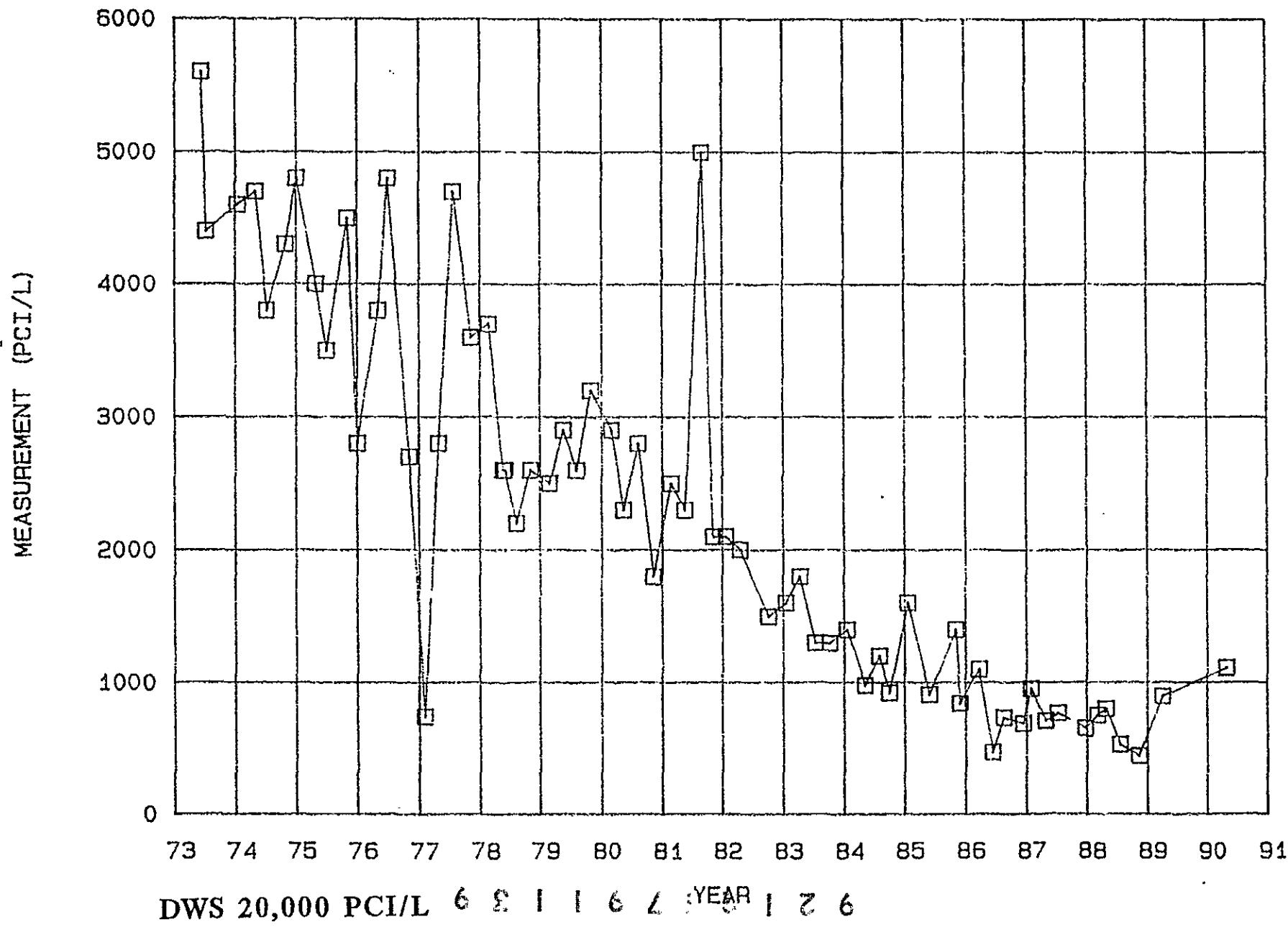
GROSS BETA

Well: 6-59-58
Code: 111 □



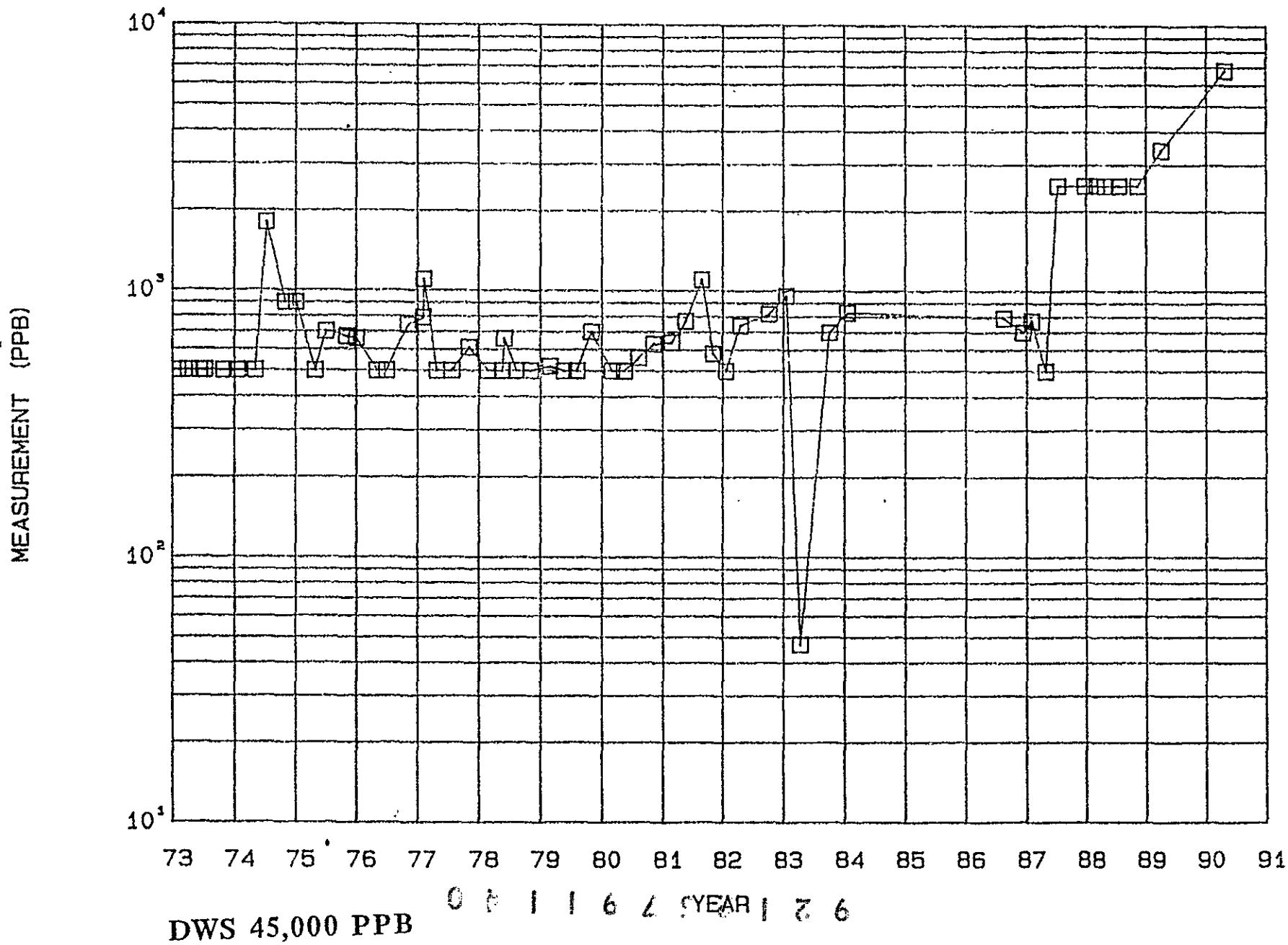
TRITIUM

Well: 6-59-58
Code: 108 □



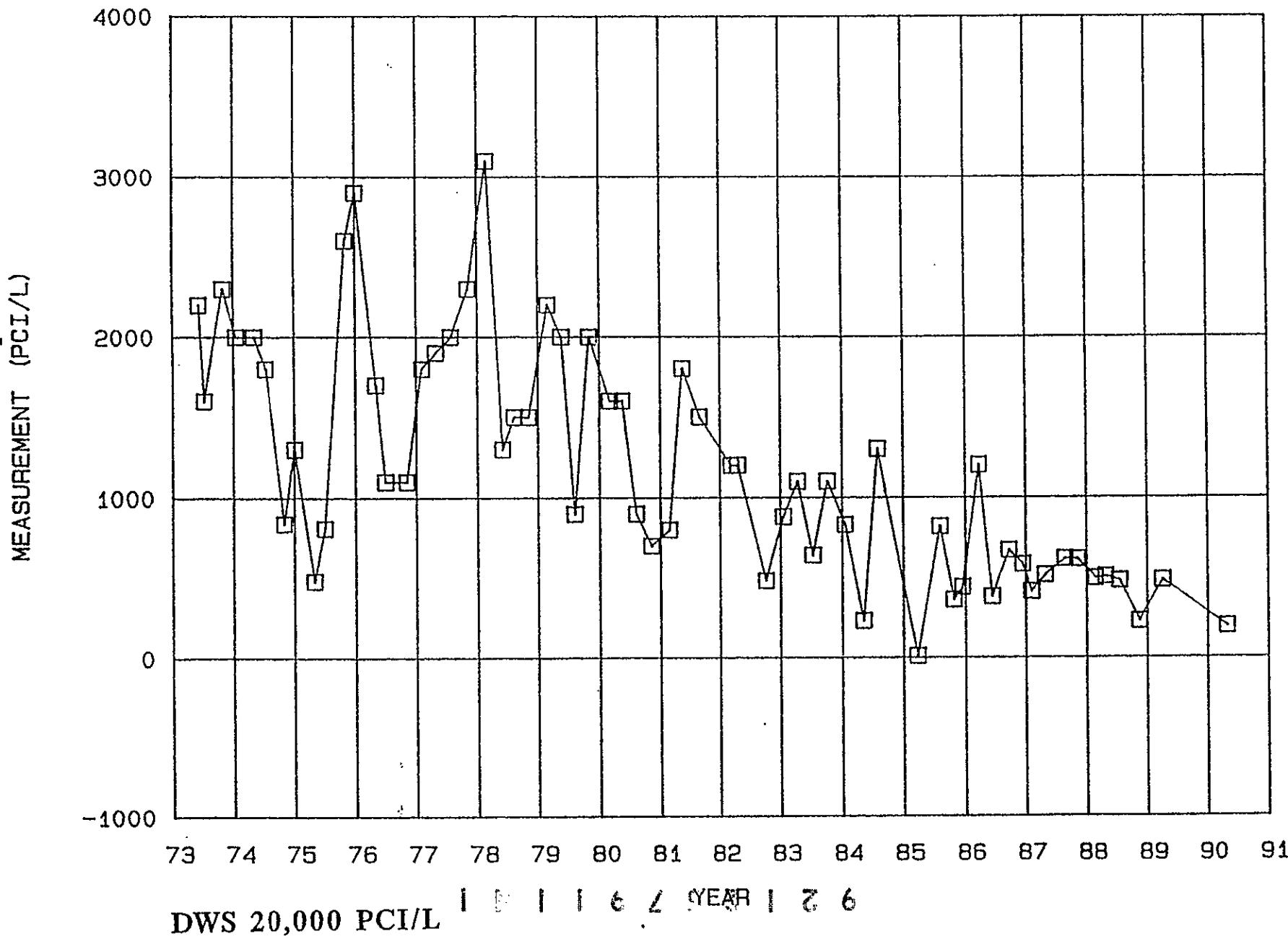
TOTAL NITRATE

Well: 6-59-58
Code: NIT □



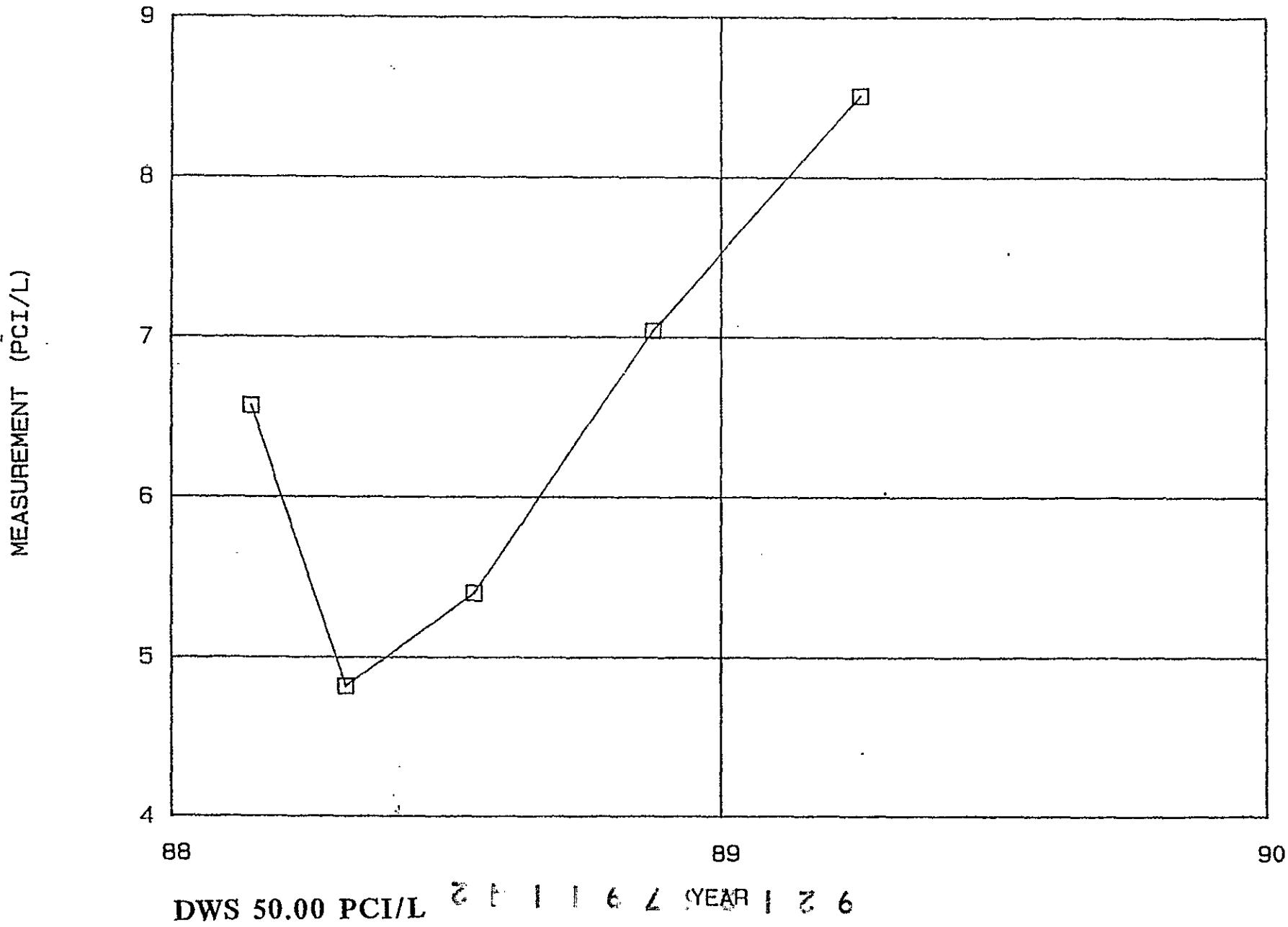
TRITIUM

Well: 6-60-57
Code: 108 □



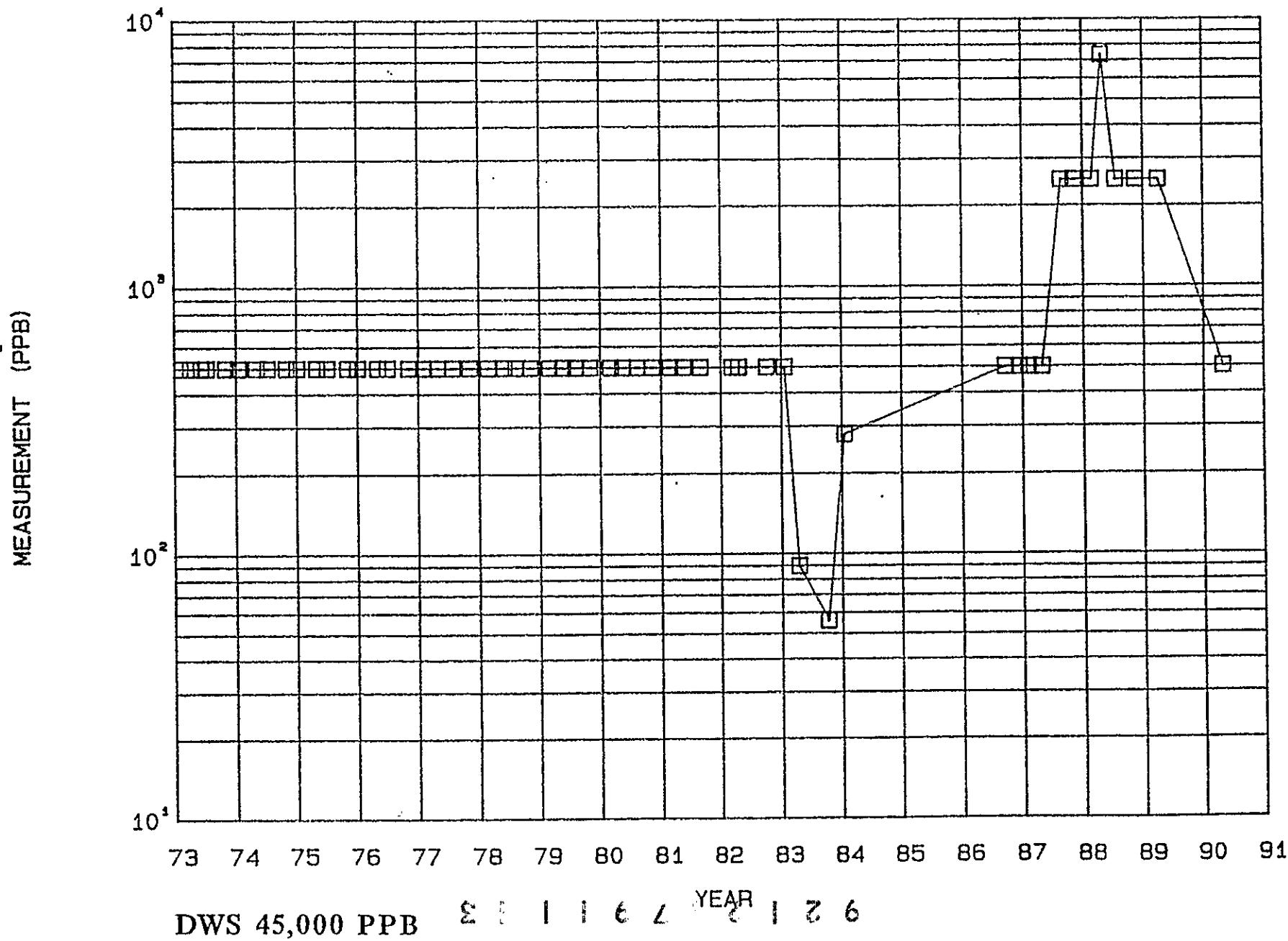
GROSS BETA

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Code: 111 □



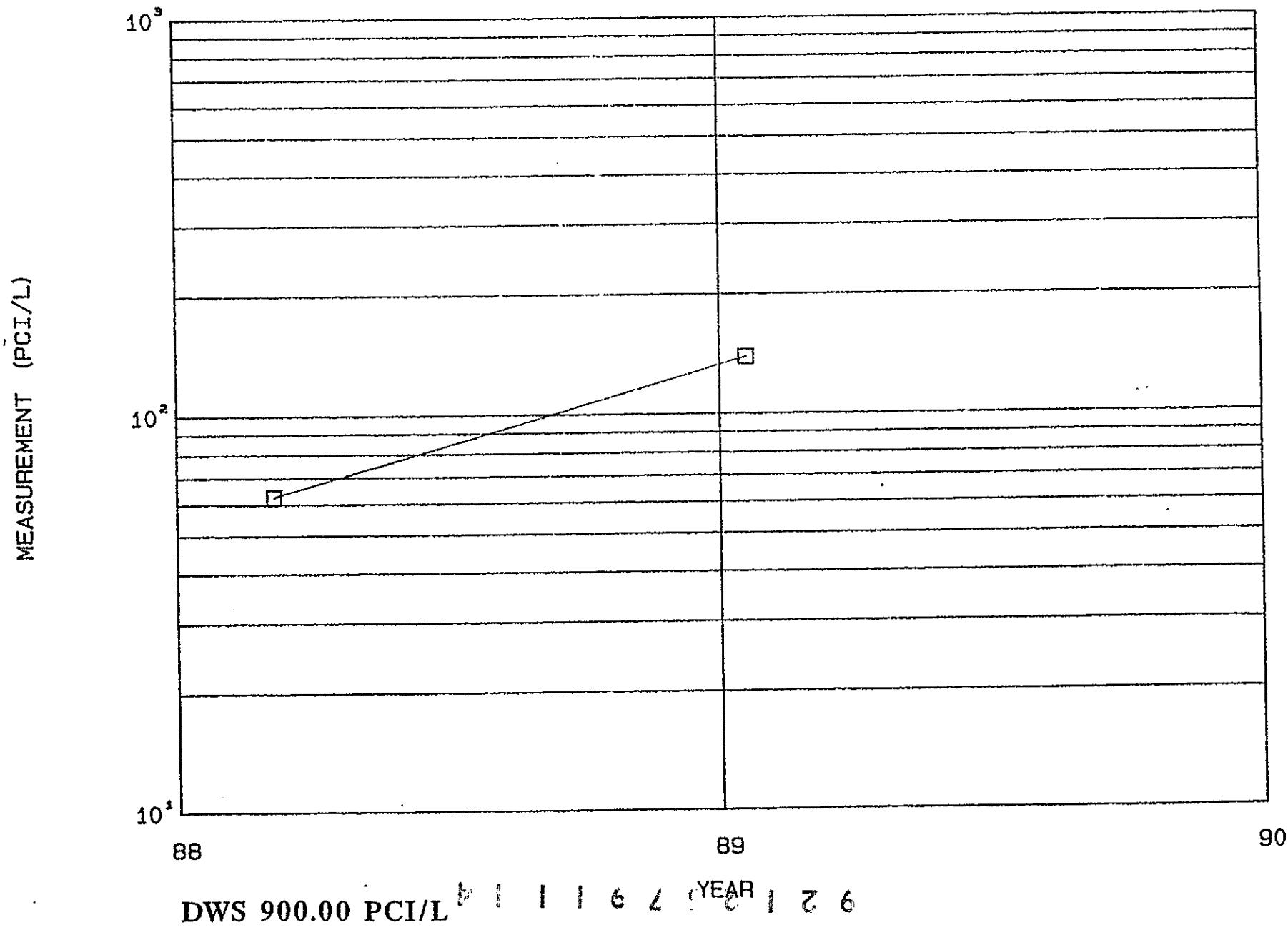
TOTAL NITRATE

Well: 6-60-57
Code: NIT



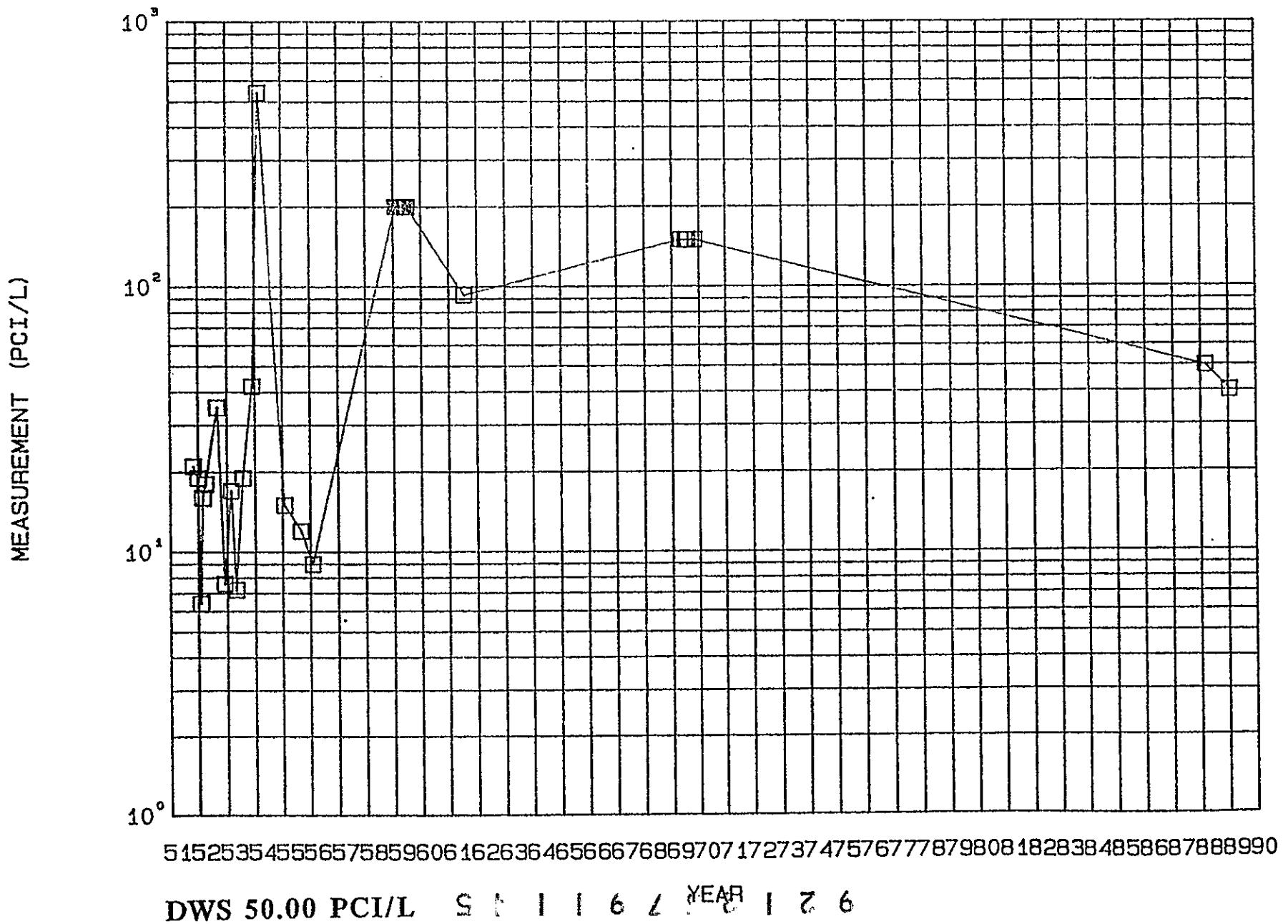
TECHNETIUM-99

Well: 6-60-60
Code: 197 □



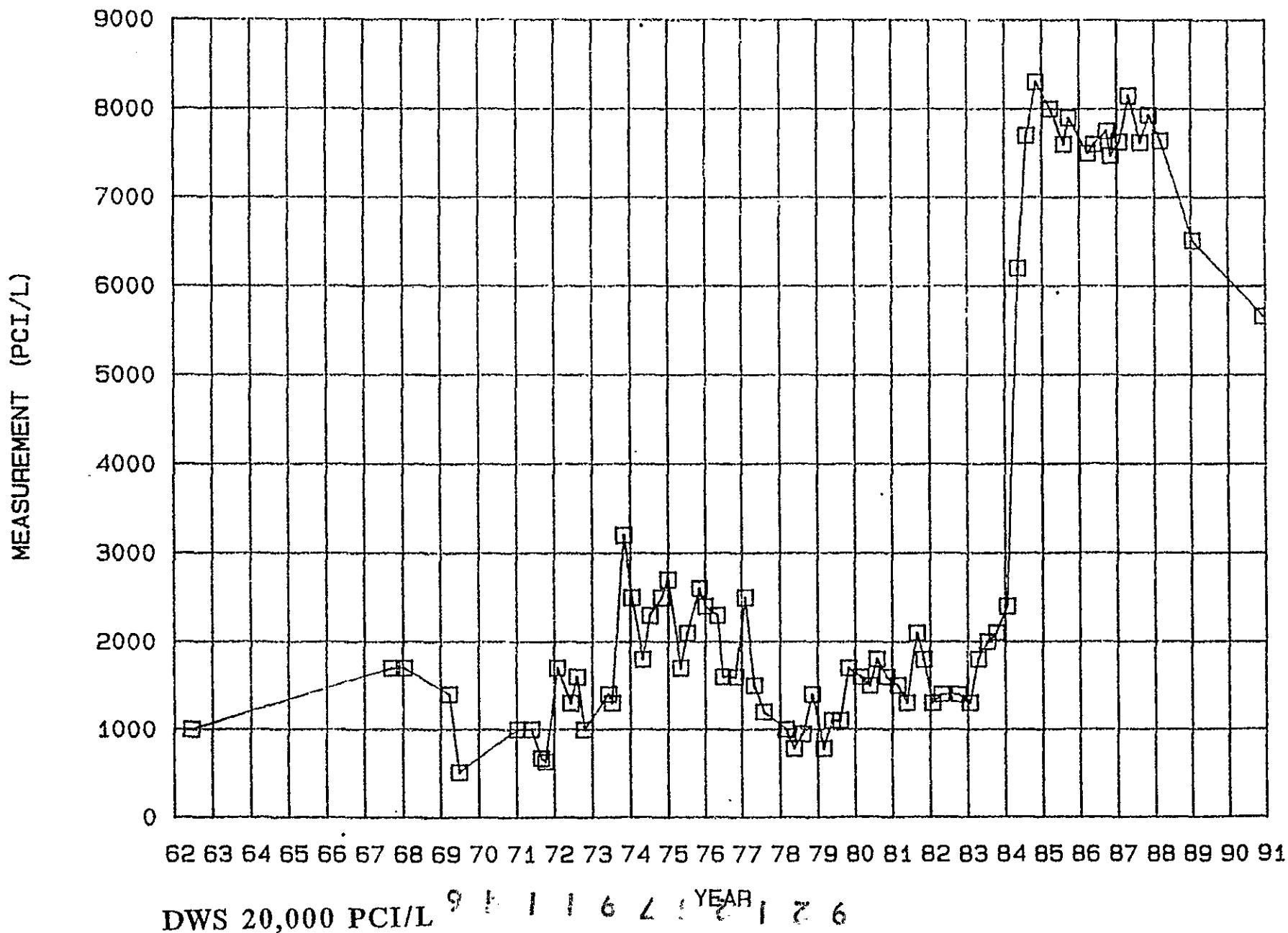
GROSS BETA

Well: 6-60-60
Code: 111 □



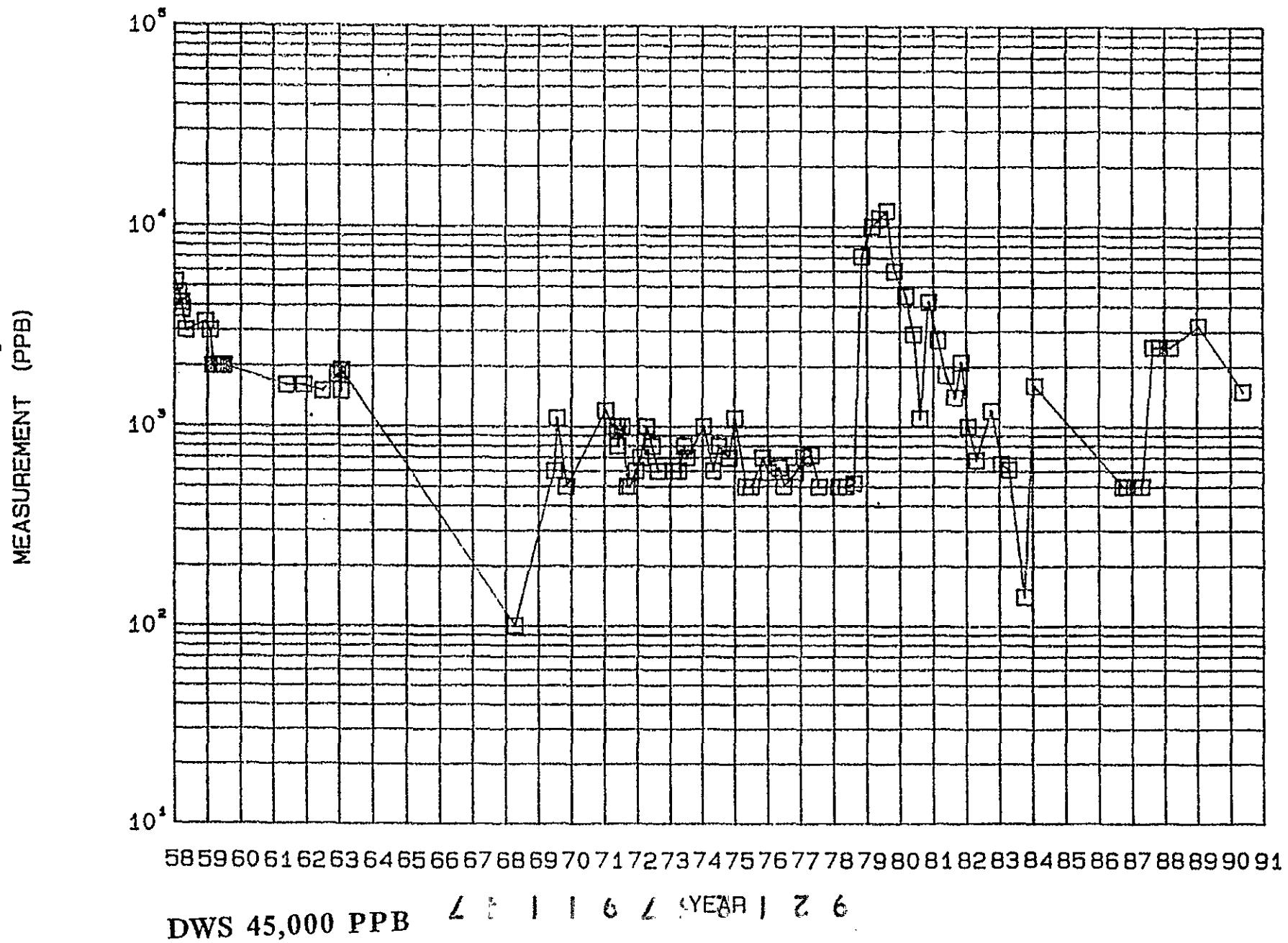
TRITIUM

Well: 6-60-60
Code: 108 □



TOTAL NITRATE

Well: 6-60-60
Code: NIT



200-BP-1 SORPTION/COLUMN LEACH TESTING**Column Leach Testing:**

- o Samples from 216-B-57 and 216-B-49 are being repacked this week.
- o Testing scheduled to begin next week.
- o QA/QC Deviations

Sorption Testing:

- o Literature Search Results
- o Testing Methodology-Discussion

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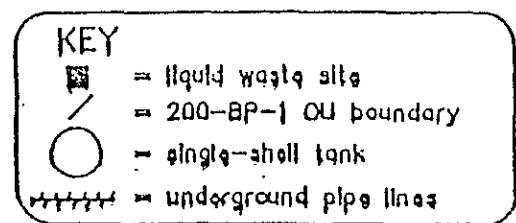
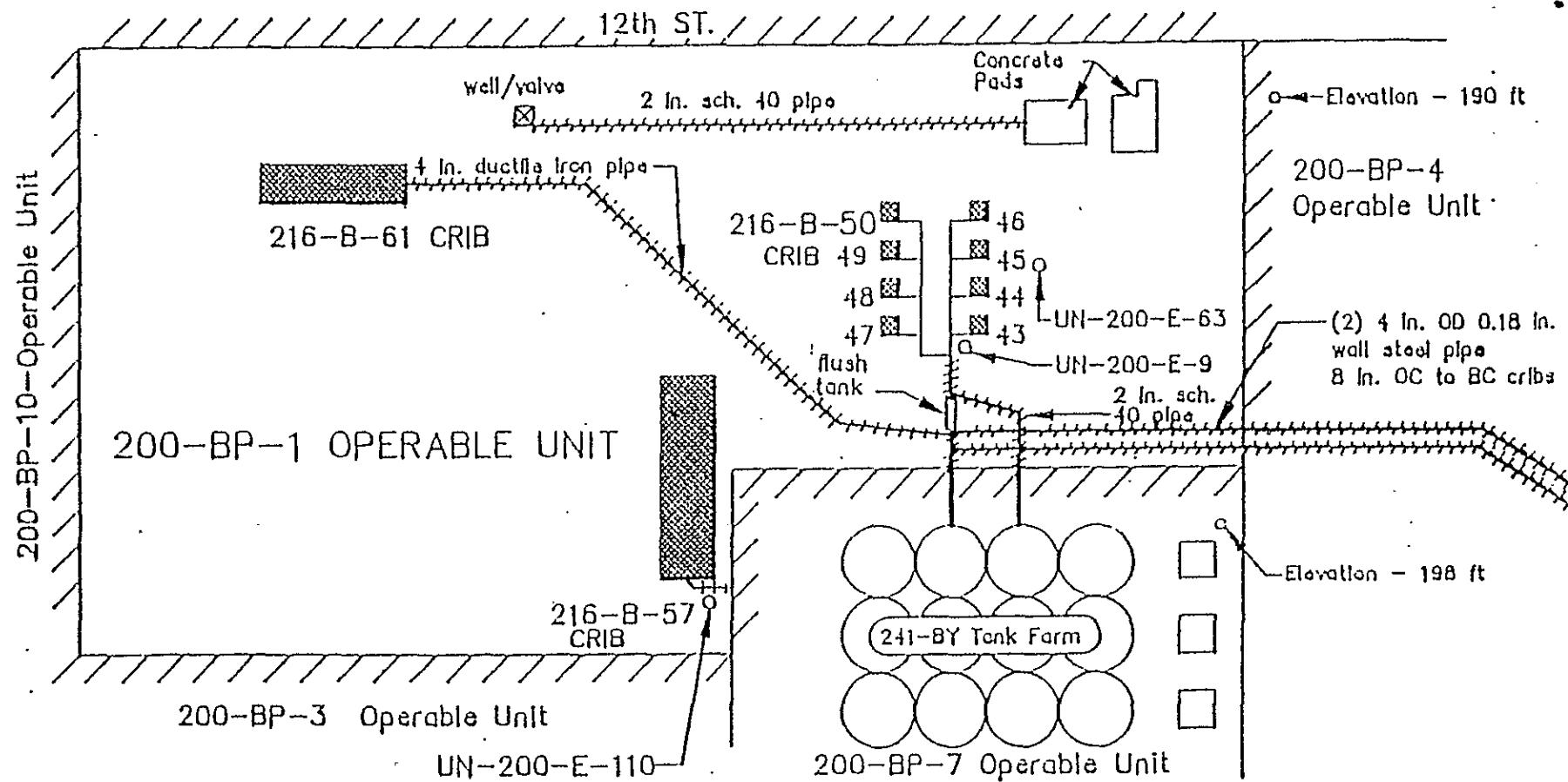
TABLE 1. Summary of K_d Data Specific to Hanford.

Species	Ambient Conditions			High Ionic Strength, Alkaline	High Acid/Organic
	Probable K_d (mL/g)	Range in K_d (mL/g)	Quality of Data (a)	Range in K_d (mL/g)	Range in K_d (mL/g)
$^3\text{H}(\text{HTO})$	0.0	0.0	1	0.0	0.0
$^{137}\text{Cs}^+$	500	500-10,000	2	1-200	1-200
$^{90}\text{Sr}^{2+}$	20	5-100	2	0.3-20	0-20
$^{60}\text{Co}^{2+}$	2000	1000-10,000	2	200-2000	10-200
Bi^{3+}	1	unknown	4	unknown	unknown
UO_2^{2+}	1	0-3	3	0-500	unknown
Pu(b)	100	100-2000	3	100-2000	1-100
$^{99}\text{TcO}_4^-$	0	0-1	2	0-1	0-1
HCN	0.1	unknown	4	unknown	unknown
HPO_4^{2-}	50	20-100	3	20-100	0-10

(a) Quality Rating

- (1) K_d values are very well known, little chance for variation because of chemical changes.
 - (2) K_d values are well known, variability caused by competing salts, pH, Eh and organics generally understood.
 - (3) K_d values are fairly well known, variability caused by chemical factors (competing salts, redox, organics etc.) not well documented.
 - (4) K_d values are not known, probable value is purely an educated guess.
- (b) The Pu oxidation state was not characterized and many forms can co-exist for Hanford ambient conditions $\text{PuO}_2^+ > \text{PuO}_2^{2+} > \text{Pu}^{4+} > \text{Pu}^{3+}$ is likely. Most waste streams at Hanford would produce soluble Pu species with $\text{PuO}_2^+ + \text{PuO}_2^{2+} > \text{Pu}^{4+} + \text{Pu}^{3+}$. Some organic-rich Hanford waste streams could solubilize Pu^{4+} species.

9 2 1 2 5 7 9 1 1 5 0



0 100 200 300 400
FEET - APPROXIMATE

200-BP-1 TASK 7 GROUNDWATER SAMPLING

- o 17 wells remain to be sampled. No progress from last month.
- o Delays caused by procedure revisions and training.
- o Analytical Results

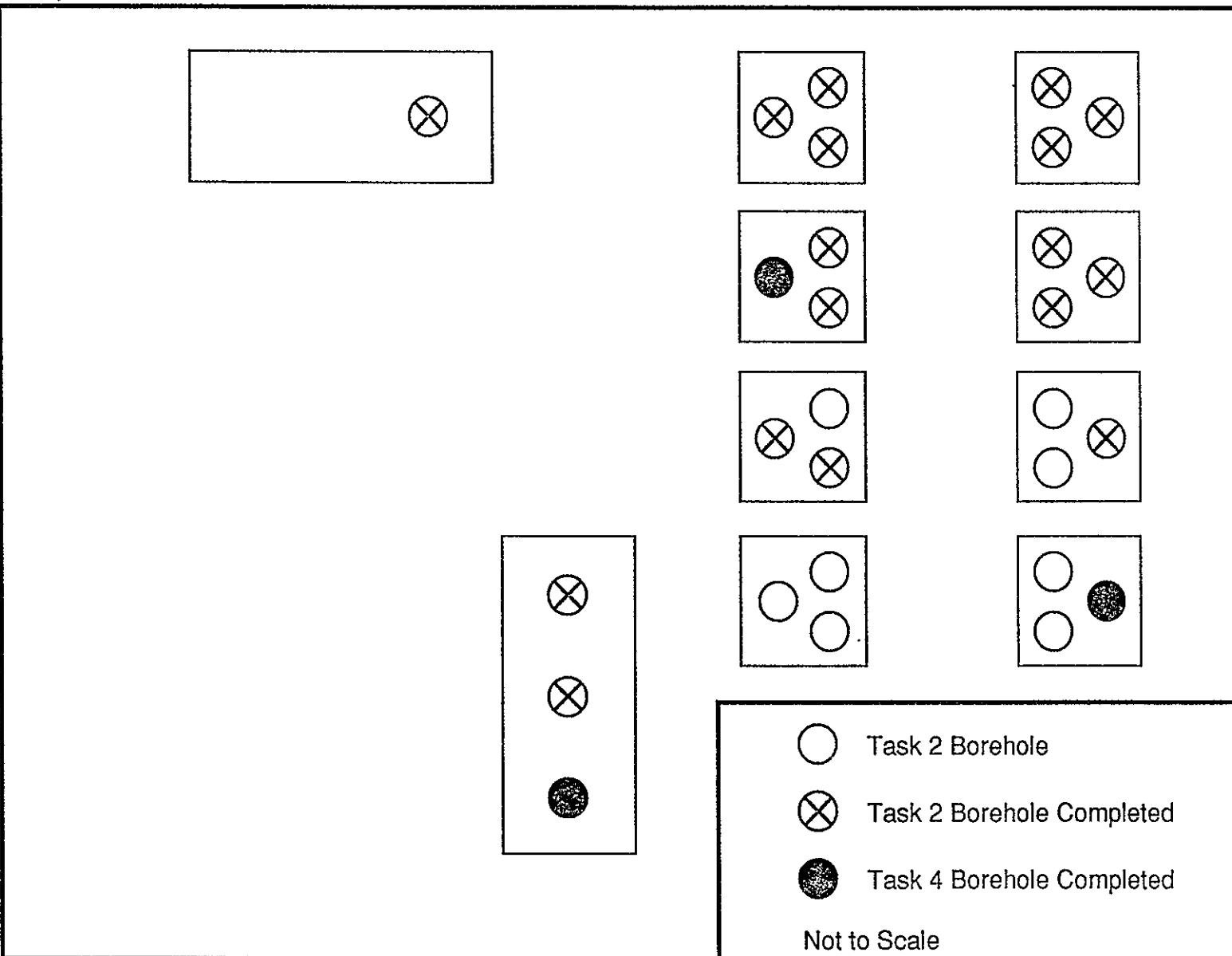
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200-BP-1 Nonradiological Groundwater Sampling Summary

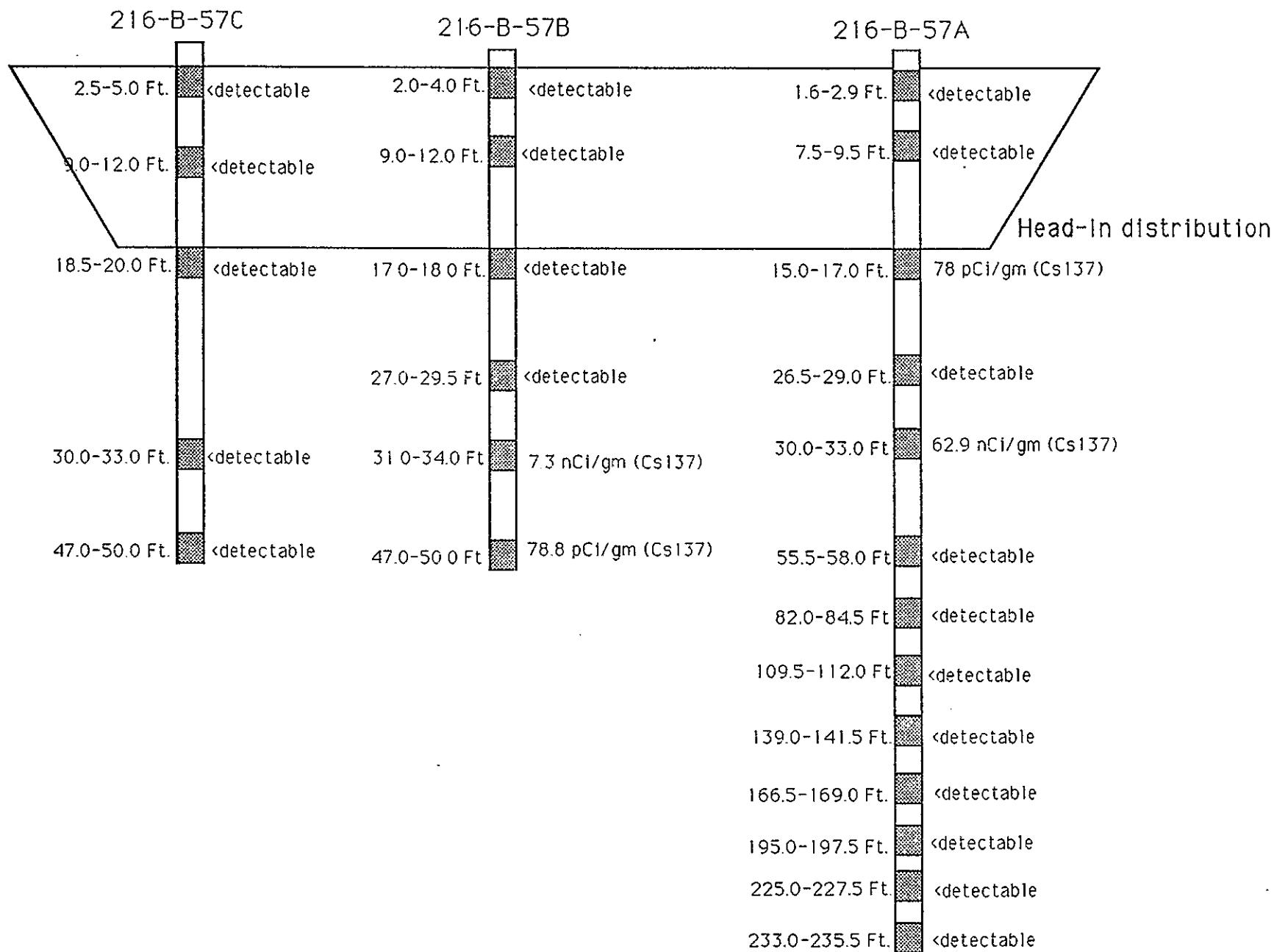
Quarter of Groundwater Sampling	Number of Samples Collected	Number of Samples Validated
2nd Quarter	190	116
3rd Quarter	135	56

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1 2 1 2 3 7 9 1 1 2

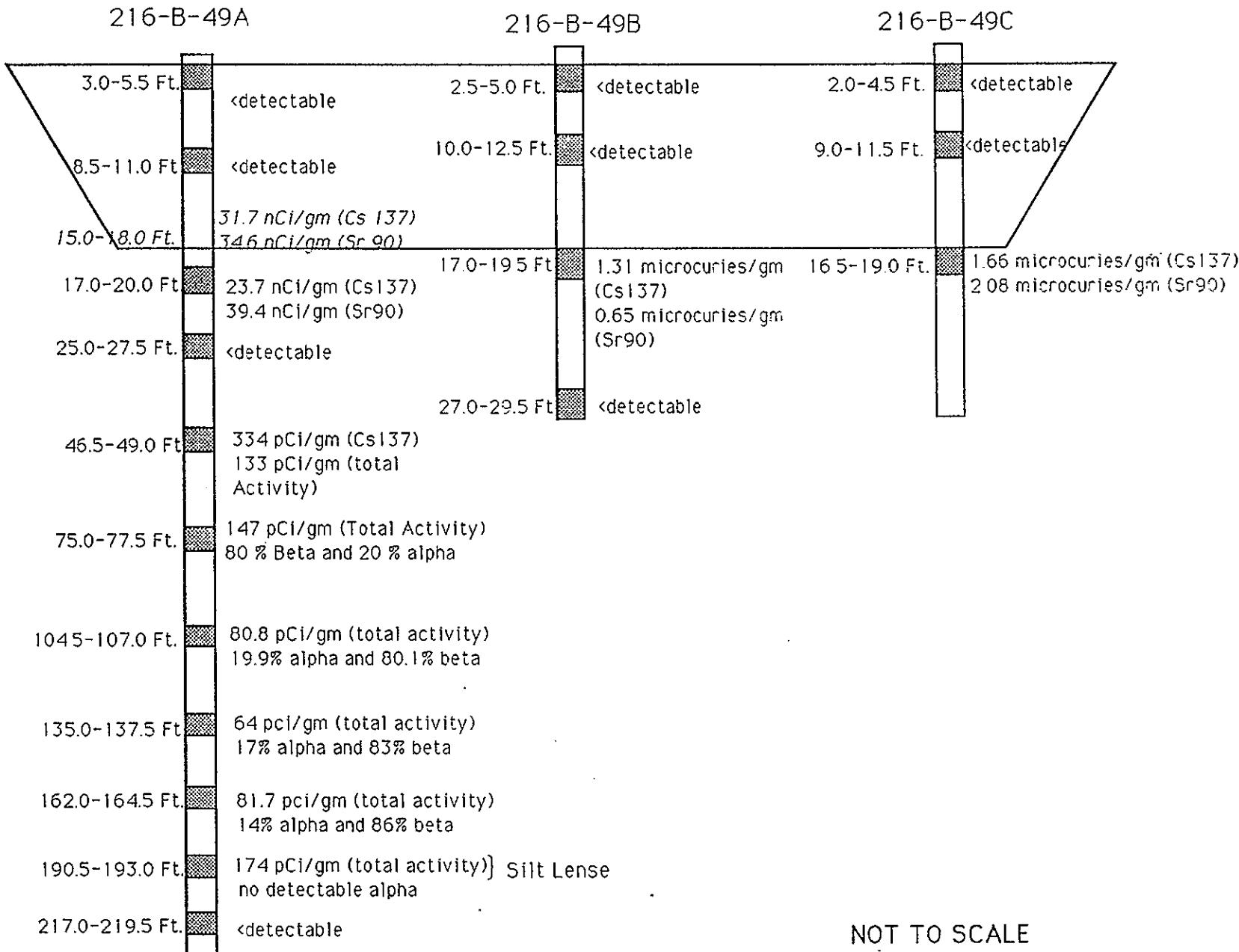
200-BP-1
Task 2/4 - Status



216-B-57 CRIB



216-B-49 CRIB



Total depth approximately 223 Ft.

S 5 1 6 7 3 2 1 9 2 6

200-BP-1 Borehole 216-B-57A Soil Samples (Parameters of Interest Data)

HEIS #	Interval (feet)	Nitrate (mg/kg)	Nitrite (mg/kg)	Total Cyanide (mg/kg)	Sulfate (mg/kg)	Selenium (mg/kg)	Ferro-cyanide (mg/kg)	Free Cyanide (mg/kg)	Bismuth (mg/kg)	Phosphate (mg/kg)	TOC
Detection Limit		1.0	1.0	0.5	20.0	0.5	0.5	1.0	10.0	5.0	
BOOX32	1.6-2.9	not alz	not alz		not alz	not alz			not alz	not alz	not alz
BOOX37	1.6-2.9	5.3	1.2	0.52		0.41	not alz	not alz	41.2		0.62 %
BOOX57	7.5-9.5	3.6	1.3	0.52		0.31	not alz	not alz	37.1		1.59 %
BOOX58	7.5-9.5	not alz	not alz		not alz	not alz			not alz	not alz	not alz
BOOX61	15.0-17.0	125.0	8.3	0.51		0.41	not alz	not alz	41.1		1680 mg/kg
BOOX62	15.0-17.0	not alz	not alz		not alz	not alz			not alz	not alz	not alz
BOOX59	26.5-29.0	4.7	1.3	1.03		0.30	not alz	not alz	30.0		0.19 %
BOOX60	26.5-29.0	not alz	not alz		not alz	not alz			not alz	not alz	not alz
BOOX63	30.0-33.0	0.74	0.05	4.60	3.03	0.77	not alz	not alz		< 0.1	
BOOX64	30.0-33.0	not alz	not alz		not alz	not alz			not alz	not alz	not alz
BOOX77	30.0-33.0	not alz	not alz		not alz	not alz			not alz	not alz	not alz
BOOX65	55.5-58.0	1190.0		1.02	3.9	0.41	not alz	not alz	40.7	1.3	853.0 mg/kg
BOOX66	55.5-58.0	not alz	not alz		not alz	not alz			not alz	not alz	not alz
BOOX78	55.5-58.0	not alz	not alz		not alz	not alz			not alz	not alz	not alz
BOOX79	55.5-58.0	1470.0		1.03	6.6	0.54	not alz	not alz	36.6	1.3	796.0 mg/kg
BOOX71	82.0-84.5	206.0		1.03	6.0	0.35	not alz	not alz	25.5	1.3	490.0 mg/kg
BOOX72	82.0-84.5	not alz	not alz		not alz	not alz			not alz	not alz	not alz

9 2 1 2 5 7 9 1 1 5 7

200-BP-1 Borehole 216-B-57A Soil Samples (Parameters of Interest Data)

HEIS #	Interval (feet)	Nitrate (mg/kg)	Nitrite (mg/kg)	Total Cyanide (mg/kg)	Sulfate (mg/kg)	Selenium (mg/kg)	Ferro-cyanide (mg/kg)	Free Cyanide (mg/kg)	Bismuth (mg/kg)	Phosphate (mg/kg)	TOC
Detection Limit		1.0	1.0	0.5	20.0	0.5	0.5	1.0	10.0	5.0	
BOOX73	109.5-112.0						not alz	not alz			
BOOX74	109.5-112.0	not alz	not alz		not alz	not alz			not alz	not alz	not alz
BOOX89	139.0-141.5	31.7		1.02	1.5	0.33	not alz	not alz	33.8	1.3	186.0 mg/kg
BOOX90	139.0-141.5	not alz	not alz		not alz	not alz			not alz	not alz	not alz
BOOX91	166.5-169.0	47.2		1.03	9.4	0.38	not alz	not alz	36.5	1.2	0.42 %
BOOX92	166.5-169.0	not alz	not alz		not alz	not alz			not alz	not alz	not alz
BOOX93	195.0-197.5	19.5		1.03	10.7	0039	not alz	not alz	40.3	1.2	0.63 %
BOOX94	195.0-197.5	not alz	not alz		not alz	not alz			not alz	not alz	not alz
BOOX95	225.0-227.5	22.0		1.02	26.2	0.40	not alz	not alz	40.0	1.3	943.0 mg/kg
BOOX96	225.0-227.5	not alz	not alz		not alz	not alz			not alz	not alz	not alz
BOOX97	233.0-235.5	15.5		1.06	23.8	0.42	not alz	not alz	39.6	1.2	399.0 mg/kg
BOOX98	233.0-235.5	not alz	not alz		not alz	not alz			not alz	not alz	not alz

200-BP-1 Borehole 216-B-49A Soil Samples (Parameters of Interest Data)

HEIS #	Interval	Nitrate (mg/kg)	Nitrite (mg/kg)	Total Cyanide (mg/kg)	Sulfate (mg/kg)	Seleniu m (mg/kg)	Ferrocyanide (mg/kg)	Free Cyanide (mg/kg)	Bismuth (mg/kg)	Phosphate (mg/kg)	TOC
Detection Limit		1.0	1.0	0.5	20.0	0.5	0.5	1.0	10.0	5.0	
BOOX67	3.0-5.5	56.5	1.2	1.0		0.4	not anlz	not anlz	40.0		1240.0 mg/kg
BOOX68	3.0-5.5	not anlz	not anlz	not anlz	not anlz	not anlz			not anlz	not anlz	not anlz
BOOX69	8.5-11.0	23.1	1.3	1.0		0.38			26.2		153.0 mg/kg
BOOX70	8.5-11.0	not anlz	not anlz		not anlz	not anlz			not anlz	not anlz	not anlz
BOOX75	17.0-20.0	not anlz	not anlz		not anlz	not anlz			not anlz	not anlz	not anlz
BOOBX7	25.0-27.5	444.0	1.3	1.0	67.3	0.39	not anlz	not anlz	38.3	50.5	0.28 %
BOOBX8	25.0-27.5	not anlz	not anlz		not anlz	not anlz			not anlz	not anlz	not anlz
BOOX76	46.5-49.0	4040.0	5.0	3.2	1080.0	0.46	not anlz	not anlz	40.0	30.8	2410.0 mg/kg
BOOX80	46.5-49.0	not anlz	not anlz	4.4	not anlz	not anlz			not anlz	not anlz	not anlz
BOOXD5	75.5-77.5	5470.0	1.3	1.0	362.0	0.37	not anlz	not anlz	37.3	1.3	0.53 %
BOOXD6	75.5-77.5	not anlz	not anlz	0.6	not anlz	not anlz			not anlz	not anlz	not anlz
BOOXD7	75.5-77.5	5330.0	1.3	1.0	361.0	0.37	not anlz	not anlz	39.7	1.3	0.52 %
BOOXD8	75.5-77.5	not anlz	not anlz	0.64	not anlz	not anlz			not anlz	not anlz	not anlz
BO15G3	104.5-107.0	3380.0	1.32	1.02	822.0	0.40	not anlz	not anlz	40.3	1.3	181 mg/kg
BO15G4	104.5-107.0	not anlz	not anlz	0.8	not anlz	not anlz			not anlz	not anlz	not anlz
BO15H5	135.0-137.5	3490.0		1.5	152.0	0.39	not anlz	not anlz	31.0	1.3	0.31 %
BO15H6	135.0-137.5	not anlz	not anlz	1.5	not anlz	not anlz			not anlz	not anlz	not anlz

9 2 1 2 6 7 9 1 1 5 9

BO15K1	162.0-164.5	2220.0		1.0	121.0	0.40	not anlz	not anlz		1.3	0.20 %
BO15K2	162.0-164.5	not anlz	not anlz		not anlz	not anlz			not anlz	not anlz	not anlz
BO15K7	190.5-193.0	3760.0		1.1	722.0	0.42	not anlz	not anlz	31.3	1.3	910.0
BO15K8	190.5-193.0	not anlz	not anlz	1.2	not anlz	not anlz			not anlz	not anlz	not anlz
BO15K9	217.0-219.5						not anlz	not anlz			
BO15L0	217.0-219.5	not anlz	not anlz	0.7	not anlz	not anlz			not anlz	not anlz	not anlz

200-BP-1 Quality Assurance Water Samples (Parameteres of Interest)

HEIS #	Sample Type	Nitrate ($\mu\text{g/L}$)	Nitrite ($\mu\text{g/L}$)	Total Cyanide ($\mu\text{g/L}$)	Sulfate ($\mu\text{g/L}$)	Seleniu m ($\mu\text{g/L}$)	Ferro-cyanide ($\mu\text{g/L}$)	Free Cyanide ($\mu\text{g/L}$)	Bismuth ($\mu\text{g/L}$)	Phosphate ($\mu\text{g/L}$)	TOC
Detection Limit		15.0	15.0	10.0	250.0	5.0	10.0	10.0	60.0	60.0	
BO15H2	trip blank	not anlz	not anlz	not anlz	not anlz	not anlz	not anlz	not anlz	not anlz	not anlz	not anlz
BOOX86	equip blank	not anlz	not anlz		not anlz	not anlz			not anlz	not anlz	not anlz
BOOX85	equip blank	0.25 mg/l	250.0	20.0	250.0	2.0	not anlz	not anlz	200.0	250.0	
BOOXD9	field blank	0.25 mg/l		25.0	250.0	2.0	not anlz	not anlz	150.0	250.0	
BOOXH0	field blank	not anlz	not anlz		not anlz	not anlz			not anlz	not anlz	not anlz

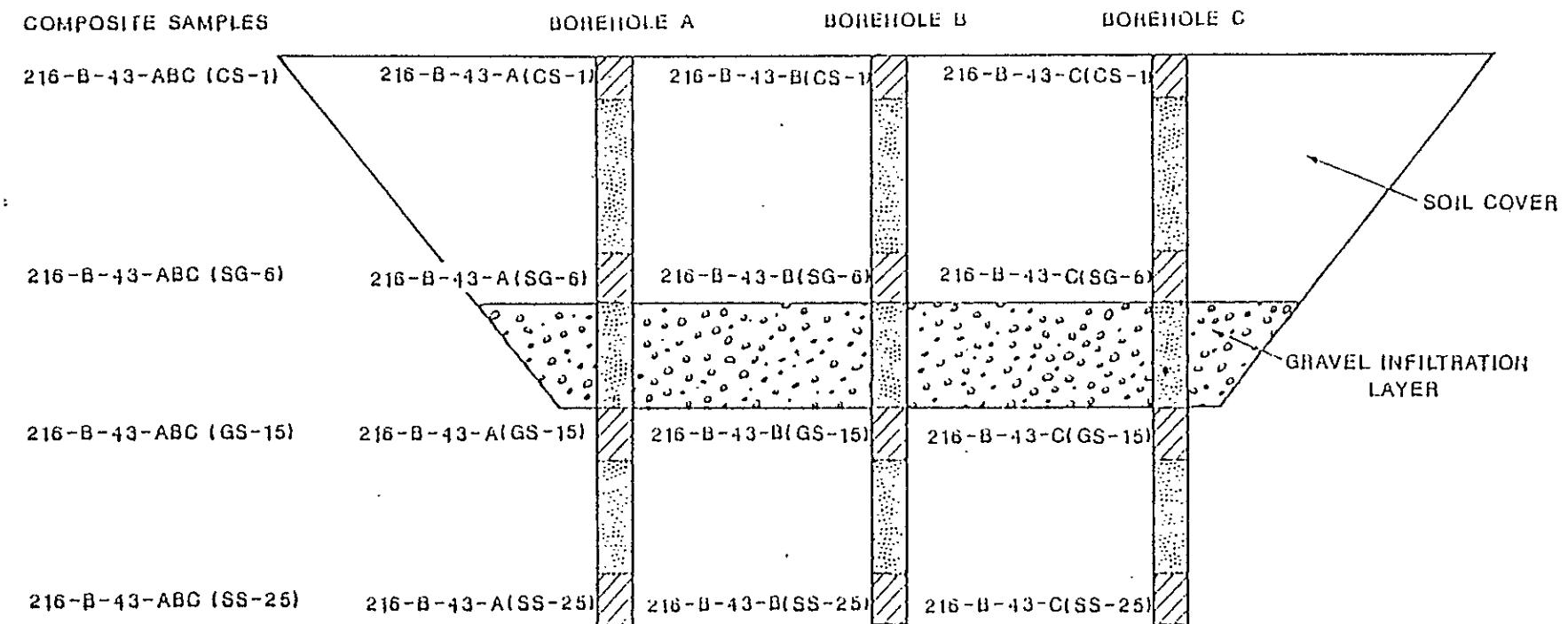
200-BP-1 Boreholes 216-B-50 Soil Samples (Radiological Data)

CRIB #	HEIS #	Interval	Total Alpha (pCi/gm)	Total Beta (pCi/gm)	Tc-99 (pCi/gm)	Sr-90 (pCi/gm)	Cs-137 (pCi/gm)	Co-60 (pCi/gm)	Pu-238 (pCi/gm)	Pu-239/2 40 (pCi/gm)	Ru-106 (pCi/gm)	Total U- (pCi/gm)
		Detection Limit	0.2	0.1	5.0	1.0	1.0	1.0	0.5	0.5	0.2	1.0
216-B-50B	BO15G5	3.5-6.0										
216-B-50B	BO15G6	3.5-6.0										
216-B-50B	BO15G7	12.0-16.0										
216-B-50B	BO15G8	12.0-16.0										
216-B-50B	BO15G9	15.5-17.5	107.5	622300.0	34.0	67700.0	572000.0	< 8.0	1.87	121.0	< 500.0	1.7
216-B-50B	BO15H1	28.0-30.5	2.9	2590.0	160.0	452.0	1890.0	< 0.4	0.00292	0.239	< 18.0	1.2
216-B-50B	BO15H3	28.0-30.5										
216-B-50B	BO15H4	28.0-30.5										
216-B-50C	BO15H7	3.5-6.0										
216-B-50C	BO15H8	3.5-6.0										
216-B-50C	BO15J7	3.5-6.0										
216-B-50C	BO15J8	3.5-6.0										
216-B-50C	BO15J9	11.0-15.0										
216-B-50C	BO15K0	11.0-15.0										
216-B-50C	BO15K3	19.0-20.5	25.7	64500.0	132.0	7750.0	562000.0	28.6	0.0442	2.96	< 280.0	22.6
216-B-50C	BO15K5	28.0-30.5										
216-B-50C	BO15K6	28.0-30.5										

TASK 2 BACKGROUND SAMPLING

1. Background
2. Eliminate the 3 background boreholes
 - o Background samples collected during Task 6
 - 600 Area wells
 - 200 Area wells
 - o Near surface samples collected
 - o Work Plan indicates that "if soils from the 216-8-61 crib do not indicate the presence of contamination, the resulting analysis will be evaluated as possible background concentrations..."
 - o Background borehole data may not be representative to the fill material within the cribs.

9 2 1 2 5 7 9 1 1 5 2



WP-137

Notes:

(CS-1) Cover Soil - 1 Foot Deep



Samples for Chemical Analysis

(SG-6) Soil-Gravel Interface - 6 Feet Deep



Samples for Archiving

(GS-15) Gravel-Soil Interface - 15 Feet Deep

(SS-25) Subsurface Soil - 25 Feet Deep

Figure 30. Schematic Diagram for Task 2--Source Sampling and Analysis.

DDT/RRL 88-32
REV 1

9 2 1 2 3 7 9 1 1 6 3

**SAMPLING SUMMARY FOR 216-B-61A
200-BP-1 OPERABLE UNIT RI/FS**

<u>SAMPLE NUMBER</u>	<u>DATE SAMPLED</u>	<u>DATE SHIPPED</u>	<u>TYPE</u>	<u>INTERVAL</u>	<u>ANALYSIS</u>	<u>LAB</u>	<u>OFFSITE NUMBER</u>	<u>BILL OF LADING</u>
BOOX30	5/9/91	5/10/91	SOIL	0-2.5	1	WESTON	W91-0214-18	2474249261
BOOX33	5/9/91	5/10/91	SOIL	0-2.5	2	PNL	N/A	N/A
BOOX31	5/9/91	5/10/91	SOIL	6.0-8.0	1	WESTON	W91-0214-18	2474249261
BOOX34	5/9/91	5/10/91	SOIL	6.0-8.0	2	PNL	N/A	N/A
BOOX38	5/10/91	5/10/91	WATER	TRIP BLANK	1	WESTON	W91-0214-18	2474249261
BOOX39	5/10/91	5/10/91	WATER	"	2	PNL	N/A	N/A
BOOX41	5/13/91	5/14/91	WATER	EQUIPMENT BLANK	1	WESTON	W91-0214-20	2474249404
BOOX40	5/13/91	5/14/91	WATER	"	2	PNL	N/A	N/A
BOOX35	5/14/91	5/15/91	SOIL	13.8-16.6	1	WESTON	W91-0214-21	2474249393
BOOX42	5/14/91	5/14/91	SOIL	13.8-16.6	2	PNL	N/A	N/A
BOOX45	5/15/91	5/16/91	WATER	FIELD BLANK	1	WESTON	W91-0214-22	2474249283
BOOX43	5/15/91	5/16/91	WATER	"	2	PNL	N/A	N/A
BOOX36	5/16/91	5/17/91	SOIL	23.0-25.3	1	WESTON	W91-0214-23	2474249316
BOOX44	5/16/91	5/17/91	SOIL	23.0-25.3	2	PNL	N/A	N/A

9 2 1 2 3 7 9 1 1 6 4

BOOX46	5/16/91	5/17/91	SOIL, DUPLICATE	23.0-25.3	1	WESTON	W91-0214-23	2474249316
BOOX47	5/16/91	5/17/91	SOIL, DUPLICATE	23.0-25.3	2	PNL	N/A	N/A
BOOX48					3			
BOOX49					3			
BOOX50					3			
BOOX51					3			
BOOX52					3			
BOOX53					3			
BOOX54					3			
BOOX55					3			
BOOX56					3			

SAMPLING ACTIVITY COMPLETED 05/16/91

* 1 - VOA, SEMI-VOA, PESTICIDES, PCB'S, TOC, ICP METALS, AA METALS, BISMUTH, CYANIDE, NO₃, NO₂, SO₄, PO₄, TOTAL ALPHA, TOTAL BETA, GAMMA SCAN, TC₉₉, SR₉₀, CS₁₃₇, CO₆₀, PU₂₃₈, PU_{239/240}, RU₁₀₆, TOTAL URANIUM.

2 - TOTAL CYANIDE, FREE CYANIDE, FERROCYANIDE.

3 - ANALYSIS OF PHYSICAL PROPERTIES (FOR FURTHER INFORMATION CONTACT S.J. TRENT, PROJECT GEOLOGIST, 6-7226).

200-BP-1 Borehole 216-B-6TA Soil Samples (Parameters of Interest Data)

HEIS #	Interval	Nitrate (mg/kg)	Nitrite (mg/kg)	Total Cyanide (mg/kg)	Sulfate (mg/kg)	Selenium (mg/kg)	Ferro- cyanide (mg/kg)	Free Cyanide (mg/kg)	Bismuth (mg/kg)	Phosphate (mg/kg)	TOC %
	Detection Limit	1.0	1.0	0.5	20.0	0.5	0.5	1.0	10.0	5.0	
BOOK30	0.0-2.5	5.0	1.3	1.04	1.3	0.33	not anlz	not anlz		1.3	1.0
BOOK33	0.0-2.5	not anlz	not anlz	0.3	not anlz	not anlz	N/R	N/R	not anlz	not anlz	not anlz
BOOK31	6.0-8.0	3.2	1.4	1.03	36.2	0.33	not anlz	not anlz		1.4	0.66
BOOK34	6.0-8.0	not anlz	not anlz	0.3	not anlz	not anlz	N/R	N/R	not anlz	not anlz	not anlz
BOOK35	13.8-16.6	1.5	0.89	1.01	21.8	0.29	not anlz	not anlz		0.89	0.61
BOOK42	13.8-16.6	not anlz	not anlz	0.3	not anlz	not anlz	N/R	N/R	not anlz	not anlz	not anlz
BOOK36	23.0-25.3						not anlz	not anlz			
BOOK44	23.0-25.3	not anlz	not anlz	0.3	not anlz	not anlz	N/R	N/R	not anlz	not anlz	not anlz
BOOK46	23.0-25.3						not anlz	not anlz			
BOOK47	23.0-25.3	not anlz	not anlz	0.3	not anlz	not anlz	N/R	N/R	not anlz	not anlz	not anlz

200-BP-1 Quality Assurance Water Samples (Parameters of Interest)

HEIS #	Interval	Nitrate ($\mu\text{g/L}$)	Nitrite ($\mu\text{g/L}$)	Total Cyanide ($\mu\text{g/L}$)	Sulfate ($\mu\text{g/L}$)	Selenium ($\mu\text{g/L}$)	Ferro- cyanide ($\mu\text{g/L}$)	Free Cyanide ($\mu\text{g/L}$)	Bismuth ($\mu\text{g/L}$)	Phosphate ($\mu\text{g/L}$)	TOC %
	Detection Limit	15.0	15.0	10.0	250.0	5.0	10.0	10.0	60.0	60.0	
BOOK40	eq blank	not anlz	not anlz	5.9	not anlz	not anlz	N/R	N/R	not anlz	not anlz	not anlz
BOOK41	eq blank	250.0	250.0	10.0	250.0	1.0	not anlz	not anlz	150.0	250.0	
BOOK43	field blank	not anlz	not anlz	5.9	not anlz	not anlz	N/R	N/R	not anlz	not anlz	not anlz
BOOK45	field blank	250.0	250.0	10.0	250.0	1.0	not anlz	not anlz	150.0	250.0	
BOOK38	trip blank	250.0	250.0	10.0	250.0	1.0	not anlz	not anlz	150.0	250.0	
BOOK39	trip blank	not anlz	not anlz	5.9	not anlz	not anlz	N/R	N/R	not anlz	not anlz	not anlz

9 2 1 2 1 7 9 1 1 5 6

200-BP-1 Borehole 216-B-61A Soil Samples (soil)

HEIS #	Interval (feet)	Total Alpha (pCi/gm)	Total Beta (pCi/gm)	Tc-99 (pCi/gm)	Sr-90 (pCi/gm)	Cs-137 (pCi/gm)	Co-60 (pCi/gm)	Pu-238 (pCi/gm)	Pu-239/240 (pCi/gm)	Ru-106 (pCi/gm)	Total U (pCi/gm)
Detection Limit		0.2	0.1	5.0	1.0	1.0	1.0	0.5	0.5	0.2	1.0
BOOX30	0.0-2.5	4.7 ± 4.0	33.0 ± 3.0		< 0.04	0.59 ± 0.06	< 0.03	< 0.002	< 0.003	< 0.3	< 0.6
BOOX31	6.0-8.0	11.0 ± 6.0	32.0 ± 3.0		< 0.04	0.17 ± 0.04	< 0.03			< 0.4	
BOOX35	13.8-16.6	6.8 ± 4.6	23.0 ± 3.0		< 0.04	< 0.03	< 0.04	< 0.009	< 0.005	< 0.3	
BOOX36	23.0-25.3	7.8 ± 4.8	25.0 ± 3.0	< 0.1	< 0.03	< 0.03	< 0.03	< 0.02	< 0.007	< 0.3	
BOOX46	23.0-25.3	4.7 ± 4.0	32.0 ± 3.0	< 0.1	< 0.02	< 0.03	< 0.04	< 0.003	< 0.003	< 0.3	

200-BP-1 Borehole 216-B-61A Quality Assurance Samples (water)

HEIS #	Sample Type	Total Alpha (pCi/L)	Total Beta (pCi/L)	Tc-99 (pCi/L)	Sr-90 (pCi/L)	Cs-137 (pCi/L)	Co-60 (pCi/L)	Pu-238 (pCi/L)	Pu-239/240 (pCi/L)	Ru-106 (pCi/L)	Total U
Detection Level		2.0	3.0	50.0	10.0	10.0	10.0	5.0	5.0	3.0	5.0 pCi/L
BOOX38	trip blank	< 1.0	< 4.0	< 2.0	< 0.6	< 8.0	< 8.0	< 3.0	< 0.5	< 70.0	< 0.05 ugm/L
BOOX41	eq blank	< 1.0	< 4.0	< 2.0	< 0.7	< 10.0	< 10.0	< 1.0	< 0.3	< 100.0	< 0.05 ugm/L
BOOX45	field blank	< 1.0	< 3.0	< 4.0	< 0.4	< 8.0	< 6.0	< 0.5	< 0.5	< 80.0	< 0.05 ugm/L

200-BP-1 OPERABLE UNIT

PHASE I REMEDIAL INVESTIGATION
TASK-1 MANAGEMENT & STATUS REPORTS

TASK-2 SOURCE SAMPLING AND ANALYSIS

TASK-2a PREPARATION

TASK-2b DRILLING AND SOIL SAMPLING

TASK-2c SAMPLE HANDLING AND TRANSFER

TASK-2d LABORATORY AVAIL. & CHEMICAL ANALYSIS

TASK-2e BOREHOLE GEOPHYSICS

TASK-2f GEODETIC SURVEY

TASK-2g BOREHOLE ABANDONMENT

TASK-3 SURFACE/NEAR SURFACE SOIL SAMPLE/ANALYSIS

TASK-3a PREPARATION

TASK-3b EVALUATE & TEST LEAK DETECTION TECHNIQUE

TASK-3c SCINTILLATION SURVEY OF LAND SURFACE

TASK-3d STAGE 1 SOIL PROBE SURVEY

TASK-3e STAGE 2 SOIL PROBE SURVEY

TASK-3f SOIL SAMPLING

TASK-3g GEODETIC CONTROL & SURVEY

TASK-3h LABORATORY AVAIL. & CHEMICAL ANALYSIS

TASK-4 VADOSE ZONE SOIL SAMPLING & ANALYSIS

TASK-4a REVIEW & PREPARATION

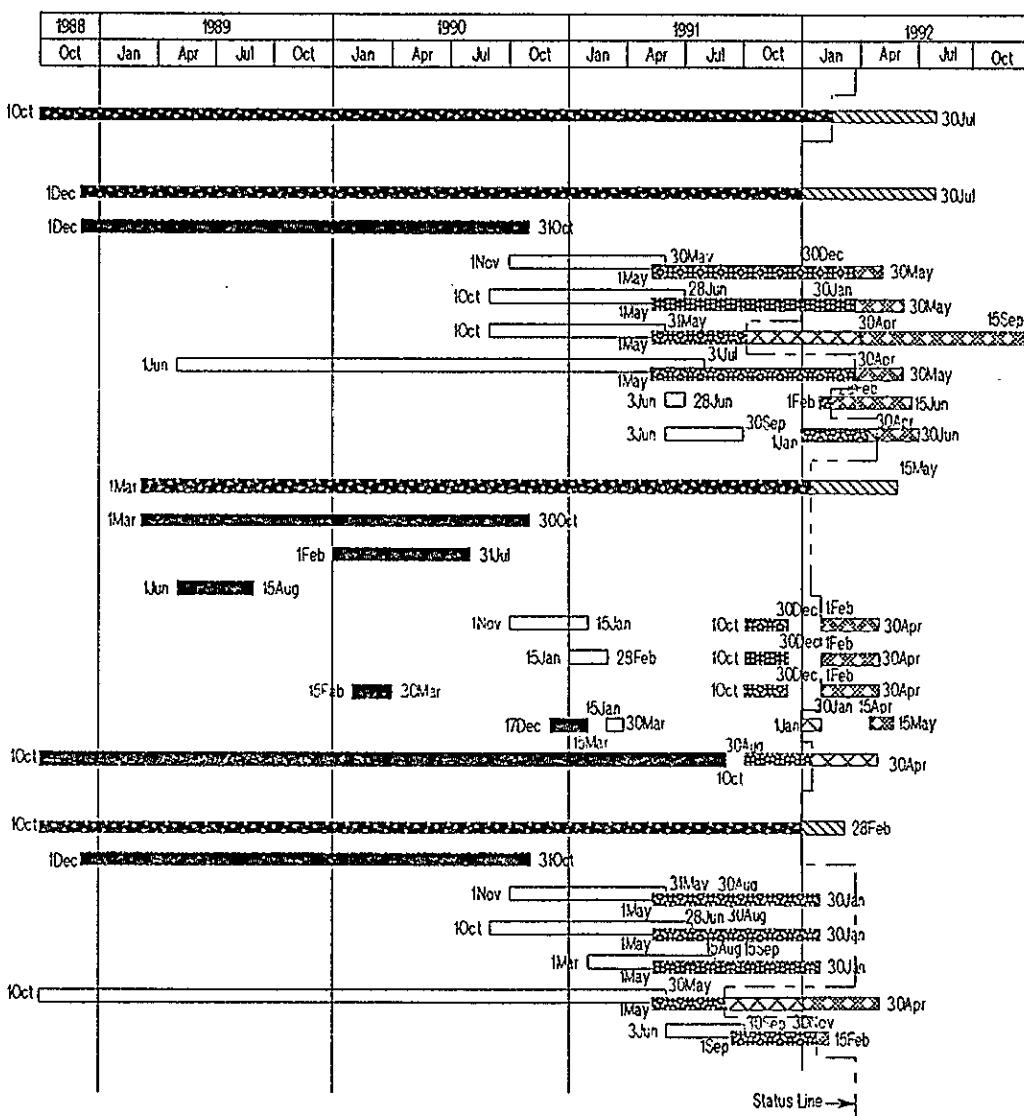
TASK-4b DRILLING & SAMPLING

TASK-4c SAMPLING, HANDLING & TRANSFER

TASK-4d BOREHOLE GEOPHYSICS

TASK-4e LABORATORY AVAIL. & CHEMICAL ANALYSIS

TASK-4f BOREHOLE ABANDONMENT



LEGEND: ORIGINAL SCHEDULE ACTIVITIES SUMMARY ACTIVITIES REVISED ACTIVITIES ACTUAL ACTIVITIES	Project: PE13A	200BP1IU	Date: 17 Mar 92 06:35
	200-BP-1 REMEDIAL INVESTIGATION		
	Page: 1 of 3	Drawn by: Steve J. Sakey	6-3092

200-BP-1 OPERABLE UNIT

TASK-5 SEISMIC REFRACTION SURVEY

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200-BP-1 OPERABLE UNIT

TASK-8 SITE TOPOGRAPHIC MAP
 TASK-8a PREPARATION
 TASK-8b FIELD SURVEY
 TASK-8c DATA REDUCTION ON CAD

TASK-9 BIOTA SURVEY
 TASK-9a SITE RECONNAISSANCE
 TASK-9b BIOTA SAMPLING
 TASK-9c LABORATORY AVAIL. & CHEMICAL ANALYSIS

TASK-10 COLUMN LEACH TEST
 TASK-10a PREPARATION
 TASK-10b TESTING PERIOD
 TASK-10c LABORATORY AVAIL. & CHEMICAL ANALYSIS

TASK-11 HYDRAULIC PUMP TESTS
 TASK-11a PREPARATION
 TASK-11b CONDUCT SLUG TEST
 TASK-11c CONDUCT DRAWDOWN/RECOVERY TESTS

TASK-12 SORPTION TEST
 TASK-12a PREPARATION
 TASK-12b TEST PERIOD
 TASK-12c LABORATORY AVAIL. & CHEMICAL ANALYSIS

TASK-13 BASELINE RISK ASSESSMENT
 TASK-13a DATA COMPILED
 TASK-13b DATA ANALYSIS

TASK-14 EVALUATION AND REPORT
 TASK-14a EVALUATION AND REPORT
 TASK-14b DRAFT REPORTS

TASK-14c FINAL REPORT & REVIEW
 FINAL SECONDARY REPORT

1989			1990			1991			1992			1993	
Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	

3Apr [] 29Sep

3Apr [] 31May

1Jun [] 15Aug

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1Jun [] 29Sep

17Jul [] 29Sep

1Nov [] 30Apr

16Jul [] 30Apr

3Jun [] 29Oct

1May [] 30Jan

1Nov [] 30Apr

1May [] 31Dec

1May [] 29Mar

2Apr [] 29Mar

28Jun [] 29Dec

1Apr [] 29Dec

1May [] 31Dec

1Nov [] 30Apr

15Aug [] 14Dec

31Jul [] 31Dec

17Dec [] 15Apr

1Nov [] 29Nov

20Oct [] 30Jul

20Oct [] 30Jun

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3Jul [] 1Jun

3Jul [] 31Aug

1May [] 16Nov

TPA MILESTONE
M-15-02B-T1

1Jan [] 26Feb

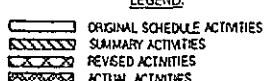
1Apr [] 3May

16Nov [] 30Dec

15Feb [] 31Mar

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STATUS LINE →

 LEGEND: ■ ORIGINAL SCHEDULE ACTIVITIES ▲ SUMMARY ACTIVITIES ✕ REVISED ACTIVITIES ■■■■■ ACTUAL ACTIVITIES	Project: PE13A	200BP1SU	Date: 17 Mar 92 07:07
	200-BP-1 REMEDIAL INVESTIGATION		
	Page: 3 of 3	Drawn by: Steve J. Sakey	6-3092

200-BP-1 Operable Unit Managers Meeting
March 25, 1992

Distribution:

Donna Lacombe, PRC	Ronald D. Izatt (A5-15)
Ward Staubitz, USGS	Director, DOE-RL, ERD
Suzanne Clarke, SWEC (A4-35)	Donald E. Gerton (A6-80)
Linda Powers, WHC (B2-35)	Director, DOE-RL, WMD
Tom Wintczak, WHC (B2-15)	Roger D. Freeberg (A5-19)
Mel Adams, WHC (H4-55)	Chief, Rstr. Br., DOE-RL/ERD
Wayne Johnson, WHC (H4-55)	Steven H. Wisness (A5-15)
Rich Carlson, WHC (H4-55)	Tri-Party Agreement Proj. Mgr
Brian Sprouse, WHC (H4-22)	Richard D. Wojtasek (B2-15)
Bill Price, WHC (SO-03)	Prgm. Mgr. WHC
Ralph O. Patt, OR Water Resources Dept.	Mary Harmon, DOE-HQ (EM-442)
Doug Dunster, Golder Assoc.	
Mike Thompson, DOE (A5-15)	
Diane Clark, DOE (A5-55)	
Mark Buckmaster, WHC (H4-55)	
Don Praast, GAO (AI-80)	

ADMINISTRATIVE RECORD: 200-BP-1; Care of Susan Wray, WHC (H4-22)

Please inform Suzanne Clarke (SWEC) of deletions or additions to the distribution list.